United States Court of Appeals

for the

District of Columbia Circuit

TRANSCRIPT OF RECORD

UNITED STATES
COURT OF APPEALS FOR THE
DISTRICT OF COLUMBIA

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Joseph W. Stewart

CLERK

APPELLANT'S BRIEF

In The

United States Court of Appeals

For the District of Columbia

No. 8592

580

MINNESOTA MINING & MANUFACTURING
COMPANY, a Corporation,
Appellant,

v.

CONWAY P. COE, Commissioner of Patents,
Appellee

Appeal from the District Court of the United States
for the District of Columbia

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In The

United States Court of Appeals

For the District of Columbia

October Term, 1943

Appeal No. 8592
(Appeal *in re* Civil Action No. 19,238)

MINNESOTA MINING & MANUFACTURING
COMPANY, a Corporation,
Appellant,

v.

CONWAY P. COE, Commissioner of Patents,
Appellee

Brief for Appellant

JURISDICTIONAL STATEMENT

This is an action brought under the provisions of the new Rules of Civil Procedure to compel the Commissioner of Patents to perform a mere ministerial act; the action is in the nature of a petition for a Writ of Mandamus (which was the procedure followed prior to the adoption of the Federal Rules of Civil Procedure).

The jurisdiction of this Court on appeal is provided by the Act of February 9, 1893, as amended, 27 Stat. 434, D. C. Code, Sec. 221 *et seq.* This appeal has been timely taken and prosecuted. The final judgment of the United States District Court for the District of Columbia was entered on June 17, 1943 (App. 24), and a notice of appeal to this Court was filed on July 16, 1943 (App. 24). The jurisdiction of the trial court, and of this Court on appeal, are furthermore well illustrated by *Coe, Commissioner of Patents, v. United States ex rel. Remington Rand, Inc.* 65 App. D. C. 387, 84 F. 2d, 240, which concerned a similar proceeding and involved the same sections of the revised statutes here involved.

THE PARTIES AND NATURE OF THE ACTION

This is an appeal by Minnesota Mining & Manufacturing Company (plaintiff in the court below, and assignee of an application for Letters Patent of Clifford L. Jewett, Serial No. 233,293, filed October 4, 1938) from the judgment of the United States District Court for the District of Columbia, dismissing its complaint in Civil Action No. 19,238. The complaint sought to compel the Commissioner of Patents to enter and consider certain amendments filed in said Jewett application on September 17, 1941 (App. 66), said amendments presenting claims copied from U. S. Patent No. 2,215,600 of Marion H. Veazey (App. 145). *In limine,* appellant desires to make it clear that it is not asking this Court to compel the Commissioner to declare an Interference. Rather, appellant seeks to compel the Commissioner to *enter* and *consider* an amendment filed in accordance with the statutes, so that it, and the applicant, will not be cut off from the right of appeal.

The action is based on the sections of the patent statutes regulating and controlling the power or jurisdiction of the Commissioner of Patents. The complaint prays that the latter be directed to perform the ministerial act of *entering and considering* an amendment filed in the aforesaid application in accordance with the clear statutory provisions.

After cursory consideration (taking up about one-half hour), and before plaintiff even had time to offer all of his evidence, and without taking time to consider the report of this Court's decision in *Coe v. Remington Rand,* aforesaid, the trial court (Justice O'Donohue) advised that he was going to dismiss the complaint, and that the attorney for the defendant should draft a judgment in accordance with that decision. However the trial court did allow the plaintiff to finish introducing its evidence, notwithstanding the fact that a decision had already been orally announced.

STATEMENT OF THE CASE

The aforesaid Jewett application (App. 29-55) was filed in the Patent Office on October 4, 1938, as a continuation-in-part of an earlier Jewett application, S. N. 700,632, filed

December 1, 1933 (App. 174-185). The said parent application Serial No. 700,632 is of no direct pertinency here, but is of some interest as background since it has a filing date prior to that of the application upon which said Veazey patent issued.*

The Jewett application here involved received several actions (App. 56-65), one of which (App. 63-65) was designated as a *final* action. Within six months after the last-mentioned action, and within the time permitted by Sec. 4903 R. S., as amended by the Act of August 5, 1939 (effective August 5, 1940), U. S. C. Title 35, Sec. 51, an amendment was filed in said application (App. 66-71) presenting claims 89, 90, 91 and 92, the same constituting a verbatim copy of claims 1, 5, 8 and 9, respectively, of the aforesaid Veazey patent. An affidavit under Rule 94 (App. 72-3) was filed along with and as a part of said amendment, without prejudice.

Said amendment was refused entry and consideration by the Examiner (App. 73-5), despite the fact that it copied claims out of a patent within the one year allowed by statute into a regular pending application, jurisdiction of which was still in the Primary Examiner. A renewed request was made for the entry of said amendment filed September 16 or 17, 1941, in a request filed December 24, 1941 (App. 88). The Examiner ignored this request, or at least did not grant it, in his next action dated January 5, 1942 (App. 89-90). A petition to the Commissioner was then filed from this refusal of the Examiner to enter the claims copied from the Veazey patent within the one year period allowed by statute (App. 90-103). This petition was referred to a Supervisory Examiner, who rendered a decision thereon dated February 23, 1942 (App. 108-110). A renewed petition to the Commissioner was then filed, requesting reconsideration (App. 111-116), and a decision thereon was rendered by an Assistant Commissioner on April 20, 1942 (App. 116-118). Both of these decisions refused to direct entry of the amendment. A further request for reconsideration of said petition to the Commissioner was subsequently filed by the applicant (App. 119-123), accompanied by a verified statement (App. 124-5), and the Assistant Commissioner rendered a further decision denying the petition (App. 125-7). A further request for reconsideration of the petition to the Commissioner was later filed (App. 135-8), and this petition was denied by the Assistant Commissioner in decision dated October 29, 1942 (App. 139). A petition to the Commissioner of Patents in person was then filed, pursuant to an oral interview between counsel's Washington representative and the Commissioner of Patents, but this petition was eventually again referred back to the Assistant Commissioner who rendered a further decision on January 26, 1943 (App. 149-152), in which the petition was also denied.

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*Where the Jewett application is referred to herein, reference will always be had to the application Serial No. 233,293, here involved, unless the other, earlier application is specifically identified.

Following this, plaintiff-appellant instituted this action on April 6, 1943 (App. 2), and trial of this action was advanced.

This case presents a unique question. Prior to the Act of August 5, 1939, amending Sec. 4903 R. S. (U. S. C. Title 35, Sec. 51), no time limit was specified *by statute* for the copying of the claims from an issued patent into a regularly pending application, although there were decisions of the courts (see this Court's decision in *Chapman v. Beede,* 54 App. D. C. 209, 296 Fed. 956), which indicated that a delay of more than two years in copying the claims of a patent might be fatal unless adequately explained. The said Act of Congress of August 5, 1939 (which became effective August 5, 1940) limited the time in which claims could be copied from a patent to one year. The Commissioner's action herein, if sustained, would mean that the Commissioner may go still further, and it would further reduce, to the vanishing point if the Commissioner should desire, the period within which claims may be copied from a patent into a regularly pending application.

The said Veazey patent, as aforesaid, issued on September 24, 1940, and the applicant's amendment presenting said claims in the Jewett application was filed on September 17, 1941 (within one year). Said amendment was also filed while the Jewett application was pending before the Primary Examiner, to wit, it was filed about two months after the Examiner's rejection dated July 11, 1941 (App. 63) and before the filing of any appeal to the Board of Appeals.

Since no right of appeal lies from the Commissioner's refusal to enter the amendment, mandamus must be invoked.

QUESTIONS INVOLVED

Appellant desires to make it clear that it is not asking this Court to reverse, revise or modify any judicial finding of the Commissioner made in the performance of his official duties; nor is it seeking to control the discretion of the Commissioner, nor to substitute the writ of mandamus (mandatory injunction) for a writ of error or an appeal. The narrow but well-defined questions raised on this appeal may be stated as follows:

(1) Whether the *mere entry and consideration* of an amendment in a regularly pending application is, under Section 4903 R. S., as amended, a ministerial act, involving no exercise of judgment or discretion on the part of the Commissioner.

We submit that the entry of an amendment in a regularly pending application (more narrowly, one which is pending before the Primary Examiner) copying claims from a patent in accordance with Sec. 4903 R. S., as amended, is not discretionary with the Commissioner. This section provides the time limit in which an amendment may be filed "presenting or asserting a claim which is the same as, or for substantially the same subject matter as, a claim of an issued patent," and the applicant complied with this statute.

(2) Does mandamus (mandatory injunction) lie where the exercise of judgment or discretion may be involved and the Commissioner refuses to decide, providing that if he did decide an aggrieved party could then have his *decision reviewed on appeal.* In other words, where a decision by a public officer (the Commissioner) would involve the exercise of discretion, from which decision an appeal on the merits would lie, and where such public officer refuses to make any decision at all, can he be compelled by mandatory injunction *to perform the act of deciding* one way or another, so that an appeal will lie.

Section 4909 R. S. undoubtedly gives an applicant the right of an appeal from the refusal of the Examiner to grant a claim, where that refusal is once repeated. Hence the Commissioner must receive and enter an amendment in a pending application; otherwise the substantial statutory right of appeal is emasculated and the statute nullified.

In paragraph 25 of the complaint, plaintiff avers that it has "no remedy by appeal or writ of error or any other adequate legal relief". In paragraph 25 of the answer, defendant admits that plaintiff has no right of appeal in respect to the claims of the amendment in question, and does not deny that plaintiff has no other adequate legal relief. No statement by defendant concerning other adequate relief appears anywhere in the answer. Since averments not denied are taken to be admitted, as a matter of pleading, the record is clear that the defendant admits that plaintiff has no adequate relief, save by this action.

The Examiner has held that the claims copied from the Veazey patent (while being directed to the same species of the invention as other claims asserted by Jewett and entered in the application) are not directed to the elected species. The Examiner required an *election of species* (under Rule 41 of the Rules of Practice of the Patent Office), but conspicuously did not make a requirement of *division* (under Rule 42 of the Rules of Practice). Both the Examiner and Commissioner have refused to rule on the question of *divisibility* between claims to different species and thus, on the basis of the record, there would be no warrant for the applicant to file an alleged divisional application to assert the claims copied from the patent. On the other hand, if the applicant failed to continue the prosecution of the present application, that is, if he failed to pursue his appeal from the Examiner's rejection to a final conclusion, and instead transferred all of the subject matter of this application to a new continuing application and commenced the prosecution anew, the Primary Examiner could then reject the claims of the application on the basis of *res adjudicata* and the Board of Appeals, as a matter of free discretion, could affirm this rejection if it chose to do so: *Ex parte Falge et al* 34 U. S. P. Q. 171, 172 (Bd. App.) 1936. Thus the applicant could not safely either present the copied patent claims in an alleged divisional application, or transfer all of the subject matter to a new continuing application.

STATUTES INVOLVED

The statutes mainly involved, as will appear from the above, are Section 4903 R. S., as amended, U. S. C., Title 35, Sec. 63, and Section 4909 R. S., as amended, U. S. C., Title 35, Section 57. The other statutes mentioned in the complaint (App. 2-14) are involved less prominently.

STATEMENTS OF POINTS RELIED UPON

The trial court erred in the several following respects:

(1) In dismissing the complaint;

(2) In not granting the relief sought in the complaint, and in not rendering a judgment, and/or in failing to issue a mandatory injunction, as sought in said complaint;

(3) In failing to hold that under the statutes plaintiff-appellant is entitled to have an amendment, filed in the application of Clifford L. Jewett, Ser. No. 233,293, on or about September 17, 1941, *entered* and *considered* in said application;

(4) In holding that the action of the Commissioner of Patents refusing to enter the said amendment in said application was one within the discretionary authority of the appellee, as Commissioner of Patents, under the statutes of the United States and the Rules of the Patent Office;

(5) In failing to hold that mandamus will lie to control the action of the Commissioner of Patents in refusing to enter said amendment in said application;

(6) In failing to hold that an amendment is timely which is filed within one year after the issue date of a patent, copying claims therefrom into a regularly pending application, and in failing to hold that such an amendment should be *entered* and *considered;*

(7) In failing to hold that an amendment filed in a regularly pending application (which is still within the jurisdiction of the Primary Examiner) within one year from the issue date of a patent, copying claims of said patent directed to subject matter indivisible from that of claims previously *entered* and *considered* in said applica-

tion, is entitled to be *entered* and *considered* in respect to said copied claims;

(8) In respect to the facts; and

(9) In respect to the applicable law.

SUMMARY OF ARGUMENT

It is appellant's position that to hold that the Commissioner, at will (and contrary to the doctrine of his decision in ex parte Fischer, infra) may refuse to *enter* and *consider* an amendment to a regularly pending application, copying claims from a patent, and filed within one year from the issue date of said patent, where the Commissioner has not held that the subject matter of said claims is divisible from claims which have previously been *entered* and *considered* in said application, would emasculate and nullify the statute, Sec. 4903 R. S., as amended by the Act of August 5, 1939; hence such holding would be improper.

If the pertinent portion of Rule 68 of the Rules of Practice of the Patent Office is interpreted so that there is an *inconsistency* between it and the statute (section 4903, R. S., as amended), the latter must prevail, and the Rule be held invalid (as held by the Supreme Court in Steinmetz v. Allen, Comm'r of Patents).

ARGUMENT

I

The Entry of an Amendment filed in a Regularly Pending application within one year after the Issue Date of a Patent, Copying Claims from said Patent, is unmistakably required by Section 4903 R. S., as amended.

This case is not broad in compass. It involves a simple question of law.

The controversy necessarily revolves around the meaning to be ascribed to the statutes, of which the first reads:

> "Sec. 4903 R. S. (U. S. C., title 35; sec. 51). Whenever, on examination, any claim for a patent is rejected, the commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application

> or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the commissioner shall order a re-examination of the case.
>
> "No amendment for the first time presenting or asserting a claim which is the same as, or for substantially the same subject matter as, a claim of an issued patent may be made in any application unless such amendment is filed *within one year* from the date on which said patent was granted."

The pertinent portion of Sec. 4909 R. S., as amended, reads:

> "Sec. 4909 R. S. (U. S. C., title 35, sec. 57.) Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, may appeal from the decision of the primary examiner to the Board of Appeals, having once paid the fee for such appeal. . . . . ."

It will be seen that applicant's amendment filed September 17, 1941 was filed within one year after the Veazey patent issued on September 24, 1940, as required by the aforesaid statute. It will also be seen that the amendment in question was presented while the Jewett application was still pending before the Primary Examiner, and before an appeal was filed to the Board of Appeals. It will be further noted that claims 89-92 of said amendment (corresponding with four claims of said Veazey patent) are also quite closely related in terms and provisions with certain claims which had been *entered* and *considered* in the Jewett application, prior to the rejection dated July 11, 1941; for example, see claims 35, 37, 76, 77 and 78 of the Jewett application, collected in the Examiner's Statement (App. 131-133).

The amendment sought to have the claims copied from the patent *entered* and *considered;* the Examiner was free to take any action with respect to said claims which he cared to, so long as he *entered* and *considered* the same. If he chose arbitrarily to reject the claims, he could do this as a matter of discretion. If he chose to refuse to declare an interference, he could do this as a matter of discretion. But the applicant sought to, and had a right to have, the claims that had been copied from the Veazey patent, *entered* and *considered,* so that he would not be deprived of the right of appeal under Section 4909 R. S.

It will be evident that the allowance of claims in the Veazey patent covering subject matter defined in the Jewett application was an error of the Patent Office, not an error of Jewett, and Jewett acted within the time limit permitted by statute to copy the conflicting claims. The Jewett application and the Veazey application were copending. Where the Patent Office overlooks the presence of interfering subject matter between two co-pending applications, and mistakenly issues one of them as a patent without first declaring an Interference and determining priority of invention, the usual, normal thing is that prosecution of the other pending application will be quite far advanced, *e. g.* under final rejection, on appeal or under allowance.

Whether or not an Interference is ever set up by the Commissioner of Patents is only discretionary with the Commissioner. This issue is not raised in this action, but merely the right to have the claims that applicant has copied from the patent *entered* and *considered,* so that applicant will not be shut off from the right of appeal thereon.

II

The Authorities Justify the Grant of a Mandatory Injunction

Reliance is placed principally upon this Court's decision in *Coe, Commissioner of Patents v. United States ex rel Remington Rand, Inc., supra,* and the decision of the Supreme Court in *Steinmetz v. Allen,* 192 U. S. 543, taken together with the unquestionable meaning of Section 4903 R. S., as amended, and Section 4909 R. S., as amended, and taken with the admission in the pleadings that appellant has no other adequate remedy, save this action.

The Commissioner admittedly has a broad discretion in his *judicial findings* which, if erroneous, can only be corrected by appeal. The Commissioner also has a broad discretion in the administration of his office, but *that discretion cannot be carried to the point where the patent statutes which he is appointed to administer are emasculated or nullified.*

In *Steinmetz v. Allen, supra,* the U. S. Supreme Court held that the Commissioner could not, in the exercise of his discretion, *refuse to adjudicate* a question of division. It held mandamus was the proper remedy to compel the Commissioner to decide whether certain apparatus and method claims could be joined in a single application. In reaching this conclusion the court said:

> "It is manifest that if an appeal cannot be compelled from the decision of the Primary Examiner, an applicant is entirely without remedy. . . . . ."
>
> "It was the duty of the Primary Examiner to accord a hearing, or refusing to do so, grant an appeal."

The determination of the Commissioner in the case at bar not to *enter* and *consider* applicant's amendment, is but a notification to the applicant of the denial of his day in court, regardless of what he might be able to establish. In *Steinmetz v. Allen, supra,* the Supreme Court found that the Commissioner did not have such sweeping, unrestrained authority as this, saying:

> "Such a rule is not the exercise of discretion; *it is a determination not to hear.** No inventor can reach the point of invoking the discretion of the Patent Office. *He is notified in advance that he will not be heard, no matter what he might be able to show.*"
>
> * * * * *
>
> "The Commissioner of Patents is primarily charged with granting and issuing patents. Applications for patents are made to him (Sec. 4888, Revised Statutes, U. S. Comp. Stat. 1901) and his superintendence should be exercised to secure the rights which the statutes confer on inventors. *The first of those rights is a hearing. If that be denied, other rights cannot accrue.*"

If the Commissioner refuses to *enter* and *consider* an amendment which timely copies claims from an issued patent, as provided by statute, he may be compelled to do so by mandamus. Under the statute the applicant must be given the right of a hearing. Without that right, appeal by an aggrieved party is circumvented. This is fully recognized by the Supreme Court in *Steinmetz v. Allen, supra*:

***Italics throughout ours, unless otherwise noted.**

> "Besides, what would there be to review if the order of the primary examiner were complied with and the claims put into separate applications?"

This Court's decision in *Coe v. Remington Rand, Inc., supra,* (which concerned Section 4903 R. S. before it had been amended to include the second paragraph thereof above quoted) held that a lengthy amendment to a patent application, presented subsequent to the termination of an interference, which interference had been declared after the prosecution of the Lasker application there involved was brought to a *close* by a notice of allowance, should be entered and that the entry thereof was a mere ministerial act. There, as here, the Primary Examiner (for good measure) urged that the claims asserted in the questioned amendment were not adequately supported by the application. This, of course, did not deter this Court from directing that the amendment be entered, because the question of support is *a question of merits* which may be treated fully after the amendment is *entered*. After considering the amendment, the Examiner was free there, (as he is here) to reject the claims as lacking adequate support, if he chose to do so.

In concluding its decision, this Court there stated:

> "The duty of the Commissioner in the premises is a clear statutory requirement, and the performance of that duty is a *plain ministerial act* which cannot be avoided by any claim of discretionary power on his part."

Analogously, Jewett's presentation of the claims copied from the Veazey patent was clearly within the provisions of Section 4903 R. S., as amended, and the Commissioner should have directed the entry and consideration of said claims, in order not "to stop all further proceedings in the Patent Office" in respect thereto, as state by this Court in the case just referred to. If this appellant had any other adequate legal relief, it is recognized that it would be its duty to pursue it; but, as aforesaid, the pleadings show that there is no other adequate remedy at law to secure to the applicant the rights given him under Section 4903 R. S.

In *Holloway v. Whitely,* 4 Wall. 522, the Supreme Court of the United States said:

> "Patentees are a meritorious class, and all the aid and protection which the law allows, this court will cheerfully give them."

If the authority or power sought by the Commissioner's construction of Section 4903 R. S., as amended, is approved, he may *as a matter of arbitrary discretion,* refuse to enter an amendment in any regularly pending application, even though it has copied the claims of a patent within one year from the issue date thereof, as provided by statute. This would give the Commissioner a free hand in nullifying and emasculating the Act of Congress.

Thus far it is not believed that there has been any judicial interpretation of Section 4903 R. S., as amended by the Act of August 5, 1939. But the meaning and intent of this statute are clear.

Various decisions of this Court and the District Court can be cited by the appellee to show that mandamus cannot be invoked by a Patent Applicant (1) to compel the Commissioner to declare an Interference or (2) in any other case where the applicant has any other adequate legal relief. But it is clear from the pleadings in this case that such decisions are not controlling or pertinent here, and the citation of selected excerpts therefrom by appellee, if indulged in, will simply be confusing, and not helpful.

III

The Patent Office in Other Decisions has Entered Claims Copied from a Patent under the Provisions of Section 4903 R. S., as Amended, in a Regularly Pending Application, even though Jurisdiction of the Application had Passed Beyond the Primary Examiner when such Amendment was Filed.

In connection with this point, attention is directed to those portions of the contents of the file wrapper of the

Carlton application Serial No. 261,069, here of record (App. 152-167). There it will be seen that an amendment was filed in the Carlton application on April 28, 1942 (App. 158 *et seq.*), *i. e.* about five months after the decision of the Board of Appeals was rendered, copying the claims from a patent *within one year from the date of issue thereof.* Said amendment was *entered,* and an intereference was declared on June 2, 1942 (App. 167). This action is to be contrasted with the action of the Patent Office in the instant case where, even though the Jewett application here involved was still pending before the Primary Examiner when the amendment was presented, and the amendment was filed soon after the rejection of July 11, 1941, nevertheless entry was arbitrarily denied or at least postponed indefinitely.

IV

The Rules of Practice of the Patent Office Do not Justify the refusal to Enter the Amendment in the Jewett Application — If inconsistent with the Statutes, the Rules are invalid.

In his answer (App. 23), defendant-appellee quotes from Rule 68 of the Rules of Practice of the Patent Office, in an endeavor to show that *in all cases* the entry of an amendment after a rejection designated as *final* is purely discretionary; that the applicant can present reasons why the amendment in question was not presented earlier, and the Commissioner can regard those reasons as adequate or inadequate as a matter of unrestrained discretion *in all cases* and *irrespective of statutes.* The defendant also cites Section 483 R. S. as empowering the Commissioner to establish rules: see defendant's answer (App. 23).

But Section 483 R. S. (U. S. C. Title 35, Sec. 6) specifies that the rules be "not inconsistent with law". As the Supreme Court stated in *Steinmetz v. Allen, Commissioner of Patents, supra,* 192 U. S. 543, 565; 48 L. ed. 555, 564: "If there is inconsistency between the rules and the statutes, the latter must prevail".

Rule 68 was not amended following the aforesaid Act of Congress of August 5, 1939, so as to make the same *consistent,* as a matter of *certainty,* with Sec. 4903 R. S. as amended by said Act.

When amendments are made copying claims from a patent within one year from its issue date, pursuant to Sec. 4903 R. S., as amended, and the patent is identified, this is an adequate showing *"of good and sufficient reasons why they were not earlier presented"* as specified in Rule 68 of the Rules of Practice ——— and if interpreted otherwise Rule 68 is *pro tanto* void, as being *inconsistent* with the aforesaid statute, as amended August 5, 1939.

In *Ex parte Fischer,* 1933 C. D. 10, 12, (decided May 31, 1933) the Commissioner held:

> "Where, as here, a patent has been issued to another party and an applicant believes an interference should have been declared and in good faith copies a claim or claims from the patent, makes a complete statement as to how he considers his disclosure, supports the copied claim and requests an interference, the claim or claims should be *entered and considered* notwithstanding the application is under *final* rejection as to other claims. Where the Examiner holds the applicant is not entitled to make the claim or claims copied from the patent, he should promptly so notify the applicant and, as was done in this case, set a time within which any request for reconsideration must be filed. Should a request be filed within the time set and an additional claim or claims be presented for the purpose, in view of the Examiner's holding the applicant can not make the actual claims of the patent, of bringing to a final determination the question of interference the Examiner should *enter and consider* the additional claim or claims; and he may, if he still deems the applicant not entitled to any of the proposed claims, make his action final and *set a limit of appeal."*

When said decision was rendered by the Commissioner, Rule 68 of the Rules of Practice contained the same provision above. indicated. If he would continue to follow the doctrine of *Ex parte Fischer,* no issue would arise as to the validity of the aforesaid provision of Rule 68. But since he has chosen to reverse or ignore the *Fischer* doctrine, then an issue does arise; and either the Commissioner is improperly construing the Rule, or else it is invalid because inconsistent with the statute, *i. e.* Sec. 4903 R. S., as amended.

In *Steinmetz v. Allen, supra,* the issue was whether old

Rule 41 of the Rules of Practice of the Patent Office was valid, and the Supreme Court held that it was invalid because it was *inconsistent with the statutes.* "If there is *inconsistency* between the rules and the statutes, the latter must prevail."

CONCLUSION

For the foregoing reasons it is submitted that appellant is entitled to the relief sought and that accordingly the judgment of the court below should be reversed.

Respectfully,

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November 2, 1943

APPENDIX TO APPELLANT'S BRIEF

IN THE

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA

No. 8592

UNITED STATES
COURT OF APPEALS FOR THE
DISTRICT OF COLUMBIA

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Joseph W. Stewart
CLERK

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IN THE

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA

No. 8592

MINNESOTA MINING & MANUFACTURING
COMPANY,
a Corporation,
Appellant,
vs.

CONWAY P. COE,
Commissioner of Patents,
Appellee.

APPENDIX TO APPELLANT'S BRIEF

1 Filed Apr 6-1943

IN THE DISTRICT COURT OF THE UNITED STATES
FOR THE DISTRICT OF COLUMBIA

CIVIL ACTION No. 19238

MINNESOTA MINING & MANUFACTURING COMPANY, a Corporation,
900 Fauquier Avenue
Saint Paul, Minnesota,

Plaintiff.

vs.

CONWAY P. COE,
Commissioner of Patents,

Defendant.

COMPLAINT

(Action for Mandatory Injunction)

TO THE HONORABLE JUDGES OF THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLUMBIA:

The plaintiff, MINNESOTA MINING AND MANUFACTURING COMPANY, presents this Complaint and prays that this Court issue a mandatory injunction directed to Conway P. Coe, as Commissioner of Patents of the United States, the defendant herein, ordering and directing said defendant to enter an amendment containing claims copied from United States Patent No. 2,215,600, of Marion H. Veazey, and filed by plaintiff on or about September 16, 1941, to the specification of the application for Letters Patent of Clifford L. Jewett, Serial No. 233,293, which amendment was refused entry by the Commissioner in decisions dated April 20, 1942, May 27, 1942, October 29, 1942, and January 26, 1943 and to re-examine said application in the light of said amendment.

The Plaintiff states as follows:

(1) The plaintiff, MINNESOTA MINING AND MANUFACTURING COMPANY, is a corporation duly organized and existing under the laws of the State of Delaware and has its principal office and place of business at 900 Fauquier Avenue, Saint Paul, in the County of Ramsey and State of Minnesota, and is the owner of the en-
2 tire right, title and interest, in and to an application
for Letters Patent, Serial No. 233,293, filed by Clifford L. Jewett in the United States Patent Office on or about October 4, 1938, on an invention disclosing new and useful improvements in "COLORED GRANULATED MATERIAL" and that the assignment covering the transfer of the entire right, title and interest in and to said application from said Clifford L. Jewett to plaintiff, said Minnesota Mining and Manufacturing Company, is duly recorded in the United States Patent Office.

(2) The defendant, CONWAY P .COE, is a citizen of the United States, is Commissioner of Patents of the United States, and officially a resident of the District of Columbia, and is sued as Commissioner of Patents of the United States.

(3) Heretofore and on or about October 4, 1938, Clifford L. Jewett did make said application for United States Letters Patent, Serial No. 233,293, duly complying with all the statutes and rules of the Patent Office in such cases made and provided, and said application is still pending.

(4) On September 24, 1940, United States Letters Patent No. 2,215,600 issued to The Patent and Licensing Corporation, New York, N. Y., a corporation of Massachusetts,

as assignee of an application of Marion H. Veazey, filed March 7, 1935.

(5) On or about September 16, 1941, and within the time permitted by law, plaintiff, by its attorney, filed an Amendment in the said Jewett application, Serial No. 233,293, containing claims to the same subject matter as claims of said Veazey patent No. 2,215,600, the claims of said Amendment numbered 89, 90, 91 and 92 being a verbatim copy of claims 1, 5, 8 and 9, respectively, of said patent, and being directed to patentable subject matter; and also filed along with said Amendment an Affidavit under Rule 94 of the Rules of Practice of the Patent Office by the inventor, said Clifford L. Jewett, providing a proper averment that he made the invention defined by said claims 89, 90, 91 and 92 (i. e. claims 1, 5, 8 and 9 of said Veazey patent) long prior to March 7, 1935 (the filing date of the aforesaid Veazey application on which said patent issued), and that he made the invention defined by claims 93 - 97
presented in said Amendment at least as early as
3 December 1, 1933, i. e. the filing date of the parent
Jewett application Serial No. 700,632 (paragraphs
16 and 17, infra).

(6) On September 30, 1941 the Primary Examiner, contrary to existing laws, statutes and rules and without authority, rendered an action by which he arbitrarily refused to enter the aforesaid Amendment or any of said claims 89, 90, 91 and 92.

(7) On or about December 23, 1941, plaintiff, by its attorney, filed a paper wherein (pages 10 to 14 thereof) it requested reconsideration by the Examiner of the aforesaid Amendment and entry thereof.

(8) On January 5, 1942, the Examiner issued an action

referring to said paper filed December 23, 1941, but arbitrarily and contrary to law refused to change his previous action or to take any specific action in respect to plaintiff's request for reconsideration and entry of the aforesaid Amendment.

(9) On or about January 10, 1942, plaintiff, by its attorney, filed a Petition to the Commissioner from the refusal of the Primary Examiner to enter the aforesaid Amendment or any of claims 89 to 92 contained therein (and also from other adverse rulings of the Primary Examiner on procedural matters). This Petition was referred to a Supervisory Examiner and a decision dated February 23, 1942, was rendered by him, in which he arbitrarily and contrary to law denied the petition and affirmed the Primary Examiner's refusal to enter the said Amendment.

(10) On or about March 23, 1942, plaintiff, by its attorney, filed a further Petition to the Commissioner in the nature of a Request for Reconsideration, pointing out the errors in the Supervisory Examiner's aforesaid decision and again requesting that the aforesaid Amendment, and particularly claims 89, 90, 91 and 92 thereof (i. e. claims 1, 5, 8 and 9 of said Veazey patent) be entered for purposes of allowance and/or interference and/or appeal. Reconsideration was granted but in opinion dated April 20, 1942, Assistant Commissioner Van Arsdale arbitrarily and without authority and contrary to law refused
4 to grant the request set out above, in this paragraph, and affirmed the Supervisory Examiner's erroneous decision of February 23, 1942, refusing to enter said Amendment.

(11) The said opinion of the Assistant Commissioner contained errors as to the facts, and also contained stated conclusions which did not flow from and were not supported by the facts or the applicable law.

(12) On or about May 1, 1942, plaintiff, by its attorney, filed a further Request for Reconsideration of its Petition, together with a Verified Statement of the applicant, said Clifford L. Jewett, executed April 30, 1942. The Assistant Commissioner aforesaid then rendered opinion dated May 27, 1942, in which he granted reconsideration and modified his position, but arbitrarily and without authority and contrary to law adhered to his decision as set out in his opinion dated April 20, 1942. In said opinion of May 27, 1942, the Assistant Commissioner held that plaintiff and its assignor were not entitled to the entry of such amendment, "at least not until it has been determined that applicant is entitled to allowance of a generic claim in this application", as stated in said opinion.

(13) A further Request for Reconsideration was thereafter filed, following which a further decision of the Assistant Commissioner was rendered on October 29, 1942, whereby he again, erroneously, arbitrarily and contrary to law, denied the Petition aforesaid and refused to enter said Amendment filed on or about September 16, 1941.

(14) Then, on or about November 27, 1942, following an oral discussion between one of plaintiff's attorneys and the Commissioner of Patents, Conway P. Coe, in person, and pursuant to the oral suggestions of the Commissioner of Patents, a further Petition to the Commissioner of Patents in Person was filed on or about November 27, 1942, on behalf of plaintiff, by its attorney. Plaintiff, by its attorney, also filed a supplemental discussion at a later date, i. e. on or about December 17, 1942, following a further oral discussion between one of plaintiff's attorneys and the Commissioner of Patents in person. Then on January 26, 1943, a decision was rendered by the Commissioner of Patents (the same being signed by the Assistant Commissioner) wherein he granted reconsideration but arbitrarily

and without authority and contrary to law adhered to his previous refusals to enter or direct the entry of the aforesaid Amendment or any of claims 89 to 97 presented therein, which read as follows:

89. (Claim 1 of Veazey Patent No. 2,215,600) The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble silicate, and a slightly soluble fluosilicate adapted to react with the silicate with neutralization of the alkali, and then drying the granules, the proportions of said fluosilicate in relation to the soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

90. (Claim 5 of Veazey Patent No. 2,215,600) The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

91. (Claim 8 of Veazey Patent No. 2,215,600) As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

92. (Claim 9 of Veazey Patent No. 2,215,600) As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of pigment and the re-

action product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

93. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble alkali silicate, and a substantially water-insoluble alkali metal compound of fluorine, adapted to react with the silicate with neutralization of the alkali, and then drying the granules, the proportions of said metal compound of fluorine in relation to the soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

94. The method of coloring granular material comprising spreading coloring agent, a substantially water-insoluble alkaline metal compound of fluorine, and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

95. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of a substantially water-insoluble alkaline metal compound of fluorine and sodium silicate, and being substantially free from water-soluble salts of sodium.

6 96. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating said coating consisting substantially of pigment and the reaction product of a substantially water-insoluble alkali metal compound of fluorine and

sodium silicate, and being substantially free from water-soluble salts of sodium.

97. Roofing sheets surfaced with the article of claim 96.

(15) Claims for substantially the same subject matter as the claims of said Amendment (including claims 1, 5, 8 and 9 of said Veazey patent) have been entered in said Jewett application, Serial No. 233,293, since a time prior to the filing of the aforesaid Amendment, are still pending therein and include claims 26, 35, 37, 39, 40 and 76 - 78, which are copied in the following order:

78. The method of coloring granular material comprising the steps of: coating the granules with a water-insoluble fluosilicate of an alkaline metal, an aqueous dispersion of alkali metal silicate and coloring agent; and heating the granules to insolubilize said alkali metal silicate.

76. As a new article of manufacture, roofing granules of the class described comprising heat-resistant base granules having surfaces thereof coated with a colored weather-resisting coating comprising the reaction product of a water-insoluble fluoride of an alkaline metal and an aqueous dispersion of alkali metal silicate, and coloring agent.

77. The method of coloring granular material comprising the steps of: coating the granules with a water-insoluble fluoride of an alkaline metal, an aqueous dispersion of alkali metal silicate and coloring agent; and heating the granules to insolubilize the silicate.

26. The method of producing coated, color-bearing

comminuted material or granules which comprises admixing granules with a water solution of sodium silicate having a substantially water-insoluble alumino-silicate and a substantially water-insoluble alkali metal compound of fluorine disseminated therein (forming a slurry-like mixture) so as to coat surfaces of said granules therewith, dehydrating the resulting mixture so as to leave the reactants (comprising the said alkali metal silicate, the alumino-silicate and the alkali metal compound of fluorine) in intimate admixture in situ on surfaces of said granules, and further heating said granules until said reactants have interacted to form a substantially water-insoluble and non-alkaline, dense coating over surfaces of individual granules.

35. As a new article of manufacture, comminuted roofing granules having a color coating thereon of a weather resistant coating comprising the reaction product of an insoluble fluoride and alkali metal silicate and a coloring agent.

7 37. Roofing granules as described, containing the reaction products of a basic flux, sodium silicofluoride and a fusible silica-bearing material capable of reacting with said basic flux and said fluoride to produce an insoluble ceramic material, such granules being substantially free from tendency to effloresce, due to changes in the moisture content of the ambient atmosphere.

39. A roofing material comprising a base the surface of which is mineralized with granules as set forth in Claim 37.

40. A coating composition comprising a material of the nature of the heat-reaction product of sodium

silicate, a clay and a metal compound of fluorire which latter is heat-reactive and substantially water-insoluble.

(16) The aforesaid application of Clifford L. Jewett, Serial No. 233,293, is a Continuation-in-Part of an application of the same Clifford L. Jewett for Letters Patent, Serial No. 700,632, filed December 1, 1933 (which is long prior to the filing date of the application on which said Veazey patent No. 2,215,600 issued).

(17) said patent application Serial No. 700,632, among other things, discloses a method of producing artificially colored roofiing granules which comprises coating quartz or like granules with a mixture of pigment, a water-soluble alkali silicate, especially sodium silicate and a substantially water insoluble alkali metal compound of fluorire, especially cryolite (which, chemically, is sodium fluo-aluminate or sodium alumino-fluoride, i. e., Na3 A1F6), and then heating and drying the thus coated granules to produce a colored coating comprising the reaction product of said alkali silicate and said alkali metal compound of fluorine. A like disclosure also is given in the specification of said Jewett application, Serial No. 233,293, which latter also additionally specifically discloses sodium silico-fluoride (page 20 of its specification) for use in place of either all or part of the cryolite in the various formulae or coating compositions disclosed therein.

8 (18) The claims recited in paragraph 14 hereof are directed in substance to the same species of invention as the claims recited in paragraph 15 hereof, but differ from the latter somewhat in scope and verbiage. The claims recited in paragraph 14 hereof are not divisible from those recited in paragraph 15 hereof.

(19) None of the claims recited in paragraph 15 hereof has been held to be divisible (under Rule 42 of the Rules of Practice of the Patent Office) from any other claim in said Jewett application Serial No. 233,293, and no requirement of division has been made between any claims or groups of claims in said application. On the other hand, a requirement of election of species (under Rule 41 of the Rules of Practice of the Patent Office) was made by the Primary Examiner in Office action dated May 27, 1940, in the following terms:

> "It is found that there are four distinct ultimate species in this case as follows:
>
> A. Claims 5-7, 18, 19, and 40 for a reaction product of sodium silicate, crysolite and kaolin (Ex. 6).
>
> B. Claims 60 and 61 for a reaction product of sodium silicate and feldspar (Ex. 2 and Ex. 12).
>
> C. Claims 14, 29, and 47 for a reaction product of sodium aluminate and clay (Exe. 8 and 9), and
>
> D. Claims 37 and 39 for a reaction produce of a 'basic flux,' sodium silicofluoride and 'fusible silica bearing material; these claims read only on Ex. 6 as
>
> modified by the last paragraph on page 20, wherein the 'basic flux' is sodium silicate and the fusible siliceous material is kaolin."

The other claims in the application were regarded as generic in one respect or another. The cancellation of

claims 60 and 61 of said Jewett application Serial No. 233,293 (the only claims listed in group "B" in said Office action of May 27, 1940) was directed by Amendment filed December 23, 1941 (page 1, lines 9-11 thereof) so as to leave claims to three species in said application (as permitted by Rule 41 of the said Rules of Practice of
9 the Patent Office).

(20) In said Office action dated May 27, 1940, the Primary Examiner ruled that several claims, then and now in said Jewett application Serial No. 233,293, were generic and could be retained with any of the groups A, B, C and D, set out in paragraph 19 hereof, and further ruled that claim 26 (recited in paragraph 15 hereof) was generic to and could be retained with either of groups A and D.

(21) Claims generic to those recited in paragraph 14 have been and are now pending in said Jewett application Serial No. 233,293.

(22) The claims recited in paragraph 14 hereof cannot properly be presented and issued in an application separate from that in which the claims recited in paragraph 15 are presented and to be issued, viz, Jewett Serial No. 233,293.

(23) The claims recited in paragraph 14 hereof cannot properly be presented and issued in an application separate from that in which the generic claims of said application Serial No. 233,293 are prosecuted and to be issued, viz, Jewett Serial No. 233,293.

(24) In Office action dated September 30, 1941, aforesaid, in said Jewett application Serial No. 233,293, the Primary Examiner took action on the merits of claims 89-92

(recited in paragraph 14 hereof) but refused to enter said claims or the Amendment containing the same, thus obstructing and preventing the present plaintiff and its assignor from the right of appeal to the Board of Appeals of the Patent Office, or any review on the merits.

(25) The Commissioner of Patents, by the final decision aforesaid, sustained the position of the Primary Examiner, arbitrarily and without authority, and contrary to law refused to enter the Amendment aforesaid or any of the claims set out in paragraph 14 hereof (presented in said amendment), and such action of the Commissioner is a final one from which plaintiff has no remedy by appeal or writ of error, or any other adequate legal relief.

(26) By reason of the aforesaid facts, plaintiff has been deprived of its rights under the laws of the United States and rules of the United States Patent Office consistent therewith, and particularly under the "due process" provisions of the Constitution of the United States, and under R. S. 482, 4903, 4909, 4911 and 4915 of the Patent Statutes and under those consistent and pertinent portions of Rules 65, 67, 68, 69, 94, 133, 139, 148 and 149 of the Rules of Practice of the Patent Office, which require the Commissioner of Patents to perform the ministerial duty of entering an amendment proper in form to a duly pending application for Letters Patent, and the said Commissioner has arbitrarily and contrary to law, to the damage of plaintiff, refused to carry out such ministerial acts as he is required to by the Constitution, statutes and rules and thereby has denied plaintiff his day in Court as prescribed by the Constitution, the statutes and the rules by arbitrarily refusing to enter said amendment, from which action plaintiff has no remedy by writ of error or appeal.

Wherefore Plaintiff prays:

1. That a mandatory injunction issue out of this Court ordering and directing defendant to enter the said Amendments filed on or about September 16, 1941, in the application for Letters Patent or Clifford L. Jewett, Serial No. 233,293; ordering and directing defendant to admit the claims forming a part of said Amendment, and including claims corresponding verbatim with claims 1, 5, 8 and 9 of Veazey U. S. Patent No. 2,215,600, and ordering and directing said defendant to re-examine the aforesaid application of Clifford L. Jewett, Serial No. 233,293 in the light of such amendments in compliance with the Constitution and Statutes of the United States.

11 2. That a writ of subpoena ad respondendum may issue forthwith out of and under the seal of the Court directed to defendant requiring him at a day certain and under a certain penalty to appear and make full, true and perfect answer herein, and to stand to, perform and abide by such further order, direction and judgment as may be made or rendered against him; and that a copy of said writ, together with a copy of this Complaint be served upon said defendant, Conway P. Coe, Commissioner of Patents.

3. That defendant be ordered to suspend any further action in the Patent Office in respect to the aforesaid application of Clifford L. Jewett, Serial No. 233,293 until this action has been decided by this Court.

4. That plaintiff may have such other and further re-

lief as this Court may deem just and proper under the circumstances.

CHARLES S. GRINDLE,
Solicitor for Plaintiff
815 Fifteenth Street,
Washington, D. C.

Of Counsel:
HAROLD J. KINNEY
Saint Paul, Minnesota.

AFFIDAVIT

STATE OF MINNESOTA
ss.
COUNTY OF RAMSEY

Harold J. Kinney, being first duly sworn according to law, deposes and says that he is an attorney at law, a member of the bar of the Supreme Court of the State of Minnesota, and a member of the bar of the Supreme Court of the United States of America; that he is of counsel for Plaintiff, and that he is familiar with the facts alleged in the foregoing Complaint and believes the same to be true.

HAROLD J. KINNEY

Sworn to before me this 2nd day of April, 1943.

CAROLA A. PAUL,
Notary Public, Ramsey County, Minn.
My Commission expires March 15th, 1947.

Filed Apr 6-1943

12 CERTIFICATE OF SOLICITOR

I do hereby certify that in my opinion the foregoing Complaint is well founded in law and fact, that it presents a proper case for granting the relief prayed, and that it is not interposed for delay.

CHARLES S. GRINDLE
Solicitor for Plaintiff

Filed Apr 28 1943

13 ANSWER TO COMPLAINT

To the Honorable the Justices of the District Court of the United States for the District of Columbia

1. Defendant admits the allegation of paragraph 1 that the plaintiff is the owner of the Jewett application, Serial No. 233,293, filed October 4, 1938. He avers, however, that no claims have been allowed in that application.

2. The defendant admits the allegations of paragraph 2.

3. The defendant admits that an application for patent was filed by Clifford L. Jewett, which was given serial number 233,293, and is still pending in the Patent Office.

4. He admits the allegations of paragraph 4.

5. He admits the allegations of paragraph 5 as to the
filing, by plaintiff, of an amendment to the Jewett
14 application, which included claims copied from the
patent to Veazey, No. 2,215,600, and admits that the
said Jewett filed an affidavit purporting to be in accordance with the provisions of Rule 94 of the Patent Office and in which it was alleged that the party Jewett had made the invention covered by the said claims at least as early as December 1, 1933. He denies the existence of any law

which fixes a time after the issuance of a patent within which the entry of an amendment to a pending application copying claims of that patent shall be permitted. He avers that prior to the filing of said amendment, to wit on July 11, 1941, the claims which had been prosecuted in the Jewett application were finally rejected, which final rejection entitled the applicant to an appeal to the Board of Appeals of the Patent Office from said rejection, and further avers that such an appeal was filed on January 12, 1942 (January 11, 1942 being Sunday).

6. He admits that the primary examiner, on September 30, 1941, refused to enter the said amendment or any of the said claims 89, 90, 91 and 92, which were copied from the Veazey patent, but he denies that such action by the primary examiner was contrary to existing laws, statutes, or rules, and denies that the examiner's action was without authority and denies that it was arbitrary.

7. He admits the allegations of paragraph 7.

8. He admits the allegation that the examiner, in an action dated December 23, 1941, refused to enter the amendment, but denies that his action was arbitrary or contrary to law.

9. He admits the allegation as to the filing, by plaintiff, of a petition from the refusal of the primary examiner to enter the amendment and admits that one of the supervisory examiners rendered a decision, dated February 23, 1942, which affirmed the refusal of the primary examiner to enter the amendment, but denies that such refusal was arbitrary or contrary to law.

10. He admits the allegation that on March 23, 1942

plaintiff filed a further petition to the Commissioner of Patents and that a decision was rendered thereon by the Assistant Commissioner of Patents refusing to grant the petition to direct the entry of the amendment, but he denies that such action by the Assistant Commissioner of Patents was either arbitrary, or without authority or contrary to law.

11. He denies the allegations of paragraph 11.

12. He admits that plaintiff, about May 1, 1942, filed a further request for reconsideration with certain affidavits, and admits that the Assistant Commissioner of Patents adhered to his decision, as set out in his opinion dated April 20, 1942, but denies that the action of the Assistant Commissioner was either arbitrary, or without authority or contrary to law.

13. He admits that a still further request for reconsideration was filed by the plaintiff and that such request was again denied by the Assistant Commissioner on October 29, 1942, but he denies that the action of the Assistant Commissioner of Patents was either erroneous, arbitrary, or contrary to law.

16 14. He admits that one of plaintiff's attorneys had an interview with the Commissioner of Patents, in person, and that a petition to the Commissioner of Patents, in person, was filed by the plaintiff on or about November 27, 1942, and that plaintiff's attorneys filed a supplemental discussion on or about December 17, 1942, and one of plaintiff's attorneys had a further interview with the Commissioner of Patents. He further admits that on January 26, 1943, the Assistant Commissioner of Patents rendered a decision on said petition refusing to enter or direct the entry of the proposed amendment of Septem-

ber 14, 1941, but he denies that the action of the Assistant Commissioner was arbitrary, or without authority or contrary to law. Further answering, defendant avers that at no interview with any of plaintiff's attorneys did he make any suggestion as to what action would be taken in the premises if a further petition were filed by such attorneys.

15. He admits that it has been contended by the plaintiff that claims to substantially the same subject matter as certain claims of the Veazey patent had been entered in the Jewett application, No. 233,293, prior to the filing of the amendment of September 14, 1941, but avers that whether they are for the same subject matter as the claims of the Veazey patent is a conclusion and can be determined only by a comparison and construction of the two sets of claims.

16. He denies that the application of Jewett states that it is a continuation-in-part of an application of the said
Jewett, Serial No. 700,632, and avers that the said
17 application, as filed, contained the folowing statement:

> "This invention is a division or Continuation in Part of the application Serial No. 749,481, which was filed October 22, 1934, as a division and Continuation in Part of my earlier application Serial No. 700,632, filed December 1, 1933."

17. He admits that there is certain subject matter in the last of the aforesaid three Jewett applications which is disclosed in the first application, No. 700,632, but he avers that the statement as to what that first application discloses is a conclusion and whether that conclusion is correct can be determined only by comparing the statement with the text of the said first application, and avers that such is also the

case with reference to the allegation as to the disclosure of the Jewett application, No. 233,293.

18. The statement in paragraph 18 as to the subject matter to which the claims in paragraph 14 of the bill are directed, and whether they differ merely in scope and verbiage from other claims, and the statement that they are not divisible from claims recited in paragraph 15 of the bill, are conclusions and whether they are correct can be determined only by a careful comparison and construction of these claims.

19. He admits the allegation of paragraph 19 that no
requirement for division, in the sense of Rule 42 of the
Rules of Practice of the Patent Office, had been made between
any claims or groups of claims in the application
and he admits the allegation of said paragraph that the
primary examiner in the Patent Office had ruled that there
were four groups of claims directed to four distinct,
18 ultimate species of the alleged generic invention, and
also admits the allegations as to the cancellation of
the claims of group (B), which left in the application three
groups of claims which under Rule 41 of the Rules of Practice
of the Patent Office, can be prosecuted in a single application
if a generic claim is allowed.

20, 21. He admits the allegations of paragraphs 20 and 21.

22. Defendant avers that paragraph 22 recites no facts, but merely a conclusion of law, and, therefore, no admission or denial of the allegations of that paragraph is required.

23. Defendant avers that paragraph 23 recites no facts, but merely a conclusion of law, and, therefore, no admission

or denial of the allegations of that paragraph is required.

24. He denies the allegations of paragraph 24, except the allegation that the examiner refused to enter claims 89 to 92, which allegation he admits.

25. He denies that the refusal to enter the aforesaid amendment and claims thereof in the Jewett application, No. 233,293, was arbitrary, or without authority, and denies that it was contrary to law. He admits that no law of the United States provides for an appeal from such a decision.

26. He denies that plaintiff has been, by the aforesaid actions of the Patent Office, deprived of any rights which it had under the laws of the United States and the rules of
the United States Patent Office. He denies that
19 there was any ministerial duty which required the
Commissioner of Patents to enter an amendment in
the Jewett application under the conditions set out in the complaint, and he denies that any statute of the United States or any rules of the Patent Office made the entry of the said amendment a ministerial duty. He denies that his refusal to direct the entry of the amendment was arbitrary, or contrary to law, and denies that he has denied to plaintiff any right guaranteed to the plaintiff by the statutes relating to patents, or by the Rules of Practice of the Patent Office.

Further answering, defendant avers that Rule 41 of the Rules of Practice of the United States Patent Office, provides that two or more independent inventions may not be claimed in one application, and further provides that more than one species of an invention, not to exceed three, may be claimed in one application if that application also includes an allowable claim generic to all the claimed species. He further avers that the examiner had rejected all generic claims presented, and the applicant Jewett had elected to prosecute claims relating to the group (A), which is not the group within which claims recited in this complaint are said to fall, and that whether any claims of any of the groups other than group (A) are patentable can be determined only after a generic claim has been allowed.

Further answering, defendant avers that Section 483 R. S. (U. S. C. Title 35, Sec. 6) provides that the Commissioner of Patents, subject to the approval of the Secretary of Commerce, may, from time to time, establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office, and Section 481 R. S. (U. S. C. Title 35, Sec. 6) provides that the Commissioner of Patents, under the direction of the Secretary of Commerce, shall superintend or perform all duties respecting the granting and issuing of patents directed by law. He further avers that under the provisions of Section 483 R. S. rules have been duly promulgated with the approval of the Secretary of Commerce and that Rule 68 of the Rules of the Patent Office reads in part as follows:

> "If amendments touching the merits of the application be presented after the case is in condition for appeal, or after appeal has been taken, they may be admitted upon a showing, duly verified, of good and sufficient reasons why they were not presented."

Defendant further avers that his actions respecting the application of Jewett, No. 233,293, were performed in accordance with the Rules of Practice of the Patent Office and that said Rule 68 was in no way inconsistent with the law, and, therefore, has the force of law, and that in refusing to direct that the amendments, referred to in the complaint, be entered, he was acting within the discretionary authority conferred upon him by law, and that such an action may not be controlled by a mandatory injunction issuing from this court.

W. W. COCHRAN
Solicitor, United States Patent Office
Washington, D. C.
Attorney for Defendant

April 27, 1943

Filed Jun 17 1943

171 **JUDGMENT**

This cause came on to be heard at this term in open court and thereupon on consideration of the Complaint, the Answer and certified copies of certain papers from the Patent Office record of the application of Jewett, No. 233,-293, involved in this action and its parent application No. 700,632, which were placed in evidence, and the arguments of counsel, it is this 17th day of June, 1943.

ADJUDGED that the Complaint be and it is hereby dismissed with costs against the plaintiff.

DANIEL W. O'DONOHUE
Justice.

172 Filed Jul 16 1943

NOTICE OF APPEAL

Notice is hereby given this 16 day of July, 1943, that Minnesota Mining & Manufacturing Company, a corporation, plaintiff herein, hereby appeals to the United States Court of Appeals for the District of Columbia from the final judgment of this Court entered in this action on or about the 17th day of June, 1943, in favor of Conway P. Coe, Commissioner of Patents, defendant, and against Minnesota Mining & Manufacturing Company, plaintiff.

It is requested that all other proceedings in respect to this action, and in respect to the application for Letters Patent here involved, be stayed pending the determination of this Appeal.

CHARLES S. GRINDLE,
Attorney for Plaintiff.
815 Fifteenth St., N. W.
Washington, D. C.

Of Counsel:
HAROLD J. KINNEY
Saint Paul, Minnesota

Send to
W. W. Cochran
Solicitor
U. S. Patent Office

173 Filed Jul 20 1943

ORDER

Upon the consent of the parties hereto, through their respective counsel, it is this 20th day of July, 1943,

ORDERED that the original exhibits as designated by counsel be transmitted to the United States Court of Appeals of the District of Columbia in lieu of copies.

JAMES W. MORRIS
Justice

Consented to:
CHARLES S. GRINDLE
Counsel for Plaintiff
W. W. COCHRAN
Counsel for Defendant

MEMORANDUM

AUGUST 12 1943
Cost bond on appeal ($250.00) filed.

174 Filed Jul 23 1943

APPELLANT'S DESIGNATION OF RECORD

Now comes Minnesota Mining & Manufacturing Company, plaintiff-appellant in the above-entitled cause, by its attorneys, and designates the part of the record before this Court, which it desires to have included in the record of appeal, as follows:

1. Complaint (asking for Mandatory Injunction).
2. Defendant's Answer to the Complaint.
3. Plaintiff's Exhibit 1. Certified copy of part of file wrapper contents of the application of Clifford L. Jewett, Serial No. 233,293.
4. Plaintiff's Exhibit 2. Certified copy of part of file wrapper contents of application of Richard Paul Carlton, Serial No. 261,069.
5. Plaintiff's Exhibit 3. Certified copy of part of file wrapper contents of application of Clifford L. Jewett, Serial No. 700,632.
6. Judgment in the above identified action dated June 17, 1943.
7. Notice of Appeal.

7a. Order in re Original Exhibits.

8. This Designation of Record.

9. Clerk's memorandum that plaintiff-appellant gave bond.

10. Clerk's Certificate.

HAROLD J. KINNEY
Saint Paul, Minnesota

CHARLES S. GRINDLE
815 Fifteenth Street N.W.
Washington, D. C.
Attorneys for Plaintiff-Appellant

July 17, 1943
HJK:P
Copy Received
W. W. Cochran, Solicitor

175 DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,
ss:
District of Columbia,

I, CHARLES E. STEWART, Clerk of the District Court of the United States for the District of Columbia, hereby certify the foregoing pages numbered 1 to 20, both inclusive, and 171 to 174, both inclusive, to be a true and correct transcript of the record according to designation of record by counsel filed and made a part of this transcript, in action entitled Minnesota Mining & Manufacturing

Company, a Corporation, Plaintiff, vs. Conway P. Coe, Commissioner of Patents, Defendant, Civil Action No. 19238, as the same remains upon the files and of record in said Court, except for the following:

Plaintiff's exhibits, pages numbered 21 to 170, both inclusive, are included herein pursuant to order of this Court filed July 20, 1943.

IN TESTIMONY WHEREOF, I hereunto subscribe my name and affix the seal of said Court, at the City of Washington, in said District, this 19th day of August, 1943.

C. E. STEWART,
(SEAL) Clerk.

APPELLANT'S EXHIBIT NO. 1

21 Filed Jul 16 1943

DEPARTMENT OF COMMERCE
UNITED STATES PATENT OFFICE

To all persons to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of Extracts from the Contents of the File, in the matter of the

Pending Application of
Clifford L. Jewett,

Filed October 4, 1938, Serial Number 233,293,
for
Improvement in Colored Granulated Material.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this tenth day of June, in the year of our Lord one thousand nine hundred and forty-three and of the Independence of the United States of America the one hundred and sixty-seventh.

CONWAY P. COE
Commissioner of Patents

Attest:
John Hans
Chief of Division.
(SEAL)

22 Mail Division Oct 4 1938

PETITION

To the Commissioner of Patents:

Your Petitioner, Clifford L. Jewett, a citizen of the United States and a resident of Minneapolis, in the County of Hennepin and State of Minnesota, whose Post Office address is 791 Forest Street, Saint Paul, Minnesota, prays that Letters Patent may be granted to him for improvement in

COLORED GRANULATED MATERIAL

set forth in the annexed specification.

And he hereby appoints PAUL CARPENTER, Registry No. 5128, 140 South Dearborn Street, Chicago, Illinois, his attorney, with full powers of substitution and revocation, to sign his name to the drawings, to prosecute this application and any renewals or divisions thereof, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Saint Paul, in the County of Ramsey, and State of Minnesota, this 3rd day of October, 1938.

CLIFFORD L. JEWETT

SPECIFICATION

TO WHOM IT MAY CONCERN:

Be it known that I, Clifford L. Jewett, a citizen of the United States, and a resident of Minneapolis, in the County of Hennepin and State of Minnesota, have invented certain new and useful improvements in

COLORED GRANULATED MATERIAL

of which the following is a specification.

This application is a division and Continuation in Part of my application Serial No. 749,481, filed October 22, 1934.

This invention is a Continuation in Part of my
23 application Serial No. 749,481, which was filed Octo-
ber 22, 1934, as a (division and) Constitution in
Part of my earlier application Serial No. 700,632, filed December 1, 1933. It relates in general to comminuted or granular material, or a mineral, silicious or like nature, and more particularly to an improved process for treating such granular material and to the resultant product. My invention especially concerns the production of such a granulated mineral material or the like, having a water-resistant color-bearing coating suitable for embodiment in roofing material or the like, and while the invention is described as a colored granule and process for making the same to be incorporated in roofing materials such as shingles and the like to weather-proof or beautify the same, or for other purposes, it will be understood that the invention finds a wide field of utility.

The produce of this invention may be incorporated as a coating for a roofing shingle or as an aggregate for incorporation in artificial stone such as cast stone and the like, and for the base granule I may employ substances of a mineral, silicious or like nature, whether natural or artificial, such, for example, as slags, feldspar, slate, quartz, quartzite, novaculite, igneous rocks and, in fact, practically any of the minerals which may be found in the ordinary gravel pit, as natural mineral substances, or I may employ crushed brick and other baked clay and similar material, porcelain, terra cotta or other ceramic wastes or cement compositions.

In the prior art relating to this subject, particularly where a ceramic coating is applied to the mineral base granule under the application of high temperatures to produce a glaze thereon, it is necessary to employ care in selecting a base granule which must be refractory and free
from impurities which tend to discolor the glaze.
24 I am enabled to employ a relatively inexpensive
base granule, and the ordinary impurities found in mineral materials such as iron and manganese have no effect on the resulting color obtained in the coating, and thus practically any gravel pit may yield a granule suitable for coating according to the process of my invention.

The coated granule, according to this invention, may be incorporated as a weather-resisting coating in a sheet coated with a bituminous or other adhesive, e. g. for forming roofing material either in rolls or in shingles, or the base granule coated according to this invention may be incorporated in cast stone and the like.

Heretofore, efforts have been made to treat crushed mineral with a color bound to the granule with an organic bond, but this is unsuited for many purposes, inasmuch as the colors are only indifferently permanent, and the organic bond does not have the life or ageing characteristics necessary, particularly where it is desired to employ the granules in cast stone and the like.

As an alternative, inorganic bonds have been experimented with, and chief among those known to me are the type employing sodium silicate as a dried or dehydrated film or those in which certain combinations of sodium silicate and glaze-forming materials have been employed at relatively high temperatures to produce a fused coating or glaze on the surfaces of the granules. Others, except to a very limited extent in the production of fused coating or glazes, have never recognized, so far as I am aware, the advantages of employing aluminum bearing compounds, such as kaolin or sodium aluminate in the coating of graules. Advantages of using flourides, such as cryolite, etc., in coating compositions were apparently never recognized prior to this invention, whether in connection with unfused coatings or vitrified or fused coatings.

In various of these methods, as distinguished from the present invention, the colors or pigments are dispersed in a sodium silicate solution, the granules being coated with this mixture and then dehydrated sufficiently to bind the color and the silicate to the granule. Chief among the defects of these methods and the resulting products or articles which limit their possible use are the lack of strength of color or proper tone of color, or tendency to blooming, lack of permanence of color and the limit of the range of colors available to be produced.

In the prior art known to me employing silicates, the temperatures disclosed in such prior art are either insufficient to produce an insoluble coating composition on the granules, or are extended to such a degree as to produce fusion, and furthermore, the relationship between the silicates and other ingredients disclosed in the prior art are insufficient to provide a cement which is insoluble and weather resisting.

The principal objects and advantages of this invention reside in the provision of an improved article of manufacture, coated colored granules, which may be manufactured with a wide range of colors of extreme permanence and at a reasonable cost; the provision of treated granules of the character referred to in which a good bonding action can be attained between the base granule and the color-bearing coating; the provision of an improved granulated material suitable for use when exposed to the weather, in which desired color effects may be attained and in which steps of carrying out the process of manufacturing the same are reduced so as to reduce the cost of manufacture.

This invention also contemplates an improved
26 method of applying a color-bearing coating to mineral granules, which does not necessarily require, and, in fact, preferably avoids the employment of the extremely high temperatures usually found necessary in producing glazed coatings; the provision of an improved process in which the reaction products of a silicate and a material containing an oxide or compound of aluminum, or its equivalent, such, for example, as a clay, are employed for incorporation in a coating to be applied to a mineral granule; the provision of an improved process and resulting article in which the silicates such as sodium silicate and metallic oxide containing components such as clays, kaolin, or aluminiferous materials, such as aluminum silicate, sodium aluminum silicate, and the like, may be reacted together with a pigment to form a color-bearing cement-like coating on the individual granules; the provision of an improved article of manufacture having a color-bearing coating on the individual granules thereof including the heat reacted product of a silicate and a clay; the provision of an improved granulated material having a color-bearing coating wherein the coating is rendered insoluble by the production of a heat reaction product of sodium silicate and clay, or sodium silicate and cryolite, or mixtures of sodium silicate, clay and cryolite, including a pigment: the provision of an improved method and article of manufacture forming a color-bearing coating for the individual surfaces of granular material wherein I provide a heat-reacted product of a silicate, a chromate and clay; the provision of an improved process for the production of granulated materi-

al having the individual granules provided with a weather-resisting and insoluble color-bearing coating wherein an
improved step of treating the coating is employed
27 for dehydrating and insolubilizing the coating for
its entire depth, but, at the same time, preferably
avoiding fusion of the coating mixture and thus avoiding deleterious effects on the coating.

The present invention has, as further objects, the provision of an improved granulated mineral material having a colored coating which is permanent in its adherence to the granule; a coating material which has the property of desired fluidity by virtue of the process employed in the course of its application to the granule and which coating material, therefore, readily spreads on the base granule, assisting in attaining the desired permanence of adherence to the granule, and at the same time possesses suitable coefficients of expansion and contraction so that the color coating may be successfully applied on a wide range of different materials forming the base granule.

For the purpose of my invention, I have employed quartzite granules, due particularly to their ready availability to me, but it will be understood that, by keeping the temperatures within limits hereinafter pointed out, other granules may be employed for the purpose, such, for example, as common gravel, slate, dolomite, marble, gannister, etc., as well as crushed porcelain and the like.

The present invention in one of its forms employs as a coating composition an inorganic heat reaction product of a silicate, conveniently sodium silicate, and a clay, such, for example, as kaolin, bentonite, and the like, and the particular ingredients which I have employed as hereinafter pointed out, are, when treated according to my process, substantially insoluble in water or under various changes in weather conditions, it being one of the aims of the invention to produce a coating containing a silicate and a clay wherein a substantial dehydration of the mixture takes place without, however, fusion thereof, so that care need not be exercised in the selection of the base granule.

28 Thus the coating of my invention may be conveniently termed a high temperature cement, and where this expression is employed herein and in the claims I mean to include materials or combinations of materials which are heat reacted to an extent above dehydration temperature of the materials but below the temperature at which the combination of materials fuses.

As herein pointed out, the mineral base granule may be of any materials which will withstand temperatures of the degree necessary to produce the reaction between the silicate and clay without disintegration of the granule and a suitable pigment to be employed for imparting color to the coating should also be capable of withstanding the temperature necessary to produce the final coating.

Tthe bond in one of its forms is holding the pigment in the coating to the granule is substantially a high temperature cement produced by the reaction of sodium silicate and a clay, such as kaolin, or in other of its forms may employ equivalent materials such as sodium silicate with feldspar or cryolite, or where sodium silicate is replaced partially with sodium aluminate and used with feldspar or clay, or the like at temperatures which, for my purposes, I have found to range above about 450°C. (i. e. above approximately 850°F.). In my production of the coating, reaction is produced between the sodium silicate and clay which is substantially a dehydration of both, with a subsequent sintering together of the two into a hard, strong and non-porous insoluble and weather-resisting cement containing a coloring compound.

I have found in one of the forms of my invention that the ingredients of the color-bearing coating may be combined in the following proportions:

Granulated mineral (quartzite, etc.) to the extent
29 of 500 grams moistened with 10 cubic centimeters of
a sodium silicate solution. This sodium silicate solution should be of a specific gravity of 1.30, and the sodium silicate may be according to the formula Na_2O-3.25 SiO_2. I have obtained excellent results with a sodium silicate of this character.

To this mixture of sodium silicate and mineral I then add five grams of kaolin which is a well-known clay and appears to give excellent results in its reaction with the sodium silicate. To this is added four grams of pure red iron oxide, and the mix is then agitated until the granules are completely coated. I have found that red iron oxide performs the dual function of lending color and reacting with the sodium silicate for insolubilizing the same.

The above formula may be presented in table form, as follows:

FORMULA I

2,000 lbs. granules (quartzite, etc.)
20 lbs. kaolin
16 lbs. red iron oxide
52 lbs. sodium silicate solutions of specific gravity 1.3
Additional water if desired to facilitate mixing.

By preliminary wetting or moistening the granules with the aqueous solution of sodium silicate they are made more receptive of the coating composed of the clay and color pigment such as red iron oxide or chrome oxide or the like.

The granules thus coated are then dried and heated subject to a temperature of from 450 degrees to 750 degrees C. (850 to 1400 degrees F.) or higher. Under the application of heat in controlled amount, a reaction between the sodium silicate and clay results to form an insoluble and weather-resisting coating on the individual granules which permanently retains the pigment so that a color-bearing coating is thus produced.

I have found that excellent results are obtained at temperatures even above 1400 degrees F., as long as the maximum temperature employed is kept controlled below the fusing temperature of the mixture, which fusing temperatures in many cases lie in the range from 1600 degrees F. to 2000 degrees F. depending upon the materials which are brought together in the reaction.

Thus, my invention, is one of its aspects, may be said to give its best results and produce a color-bearing coating of best quality by the employment of much higher temperatures for reaction purposes than have heretofore been employed for setting cementitious combinations. For example, it is well known in the prior art to employ temperatures ranging from 900 degrees F. to as high as 1800 degrees F. for the purpose of producing a fused glaze, depending, of course on the fusing temperatures of the materials employed. It is not, however, known to me in prior art to produce a hard weather-resisting heat solidified cement with temperatures within the range beginning at or above the dehydration temperatures of the ingredients of the mixture, but controlled below the fusing temperature of the particular mixture employed, which is one of the novel features of my invention.

It will be understood, that I have chosen that range of temperatures in which important reactions and combinations take place without fusion, although the present invention in certain of its aspects, also comprehends fusion or sintering.

Formulae which have served to produce highly efficient and attractive color-bearing coatings employ several different forms of ingredients, in all of which I employ an ingredient containing a metallic oxide or its equivalent, may be exemplified below.

A formula employing feldspar (an alumino-silicate of K, Na, etc.) and sodium silicate is as follows:

31 FORMULA 2

2000 lbs. quartz
40 lbs. feldspar (powdered)
28 lbs. red iron oxide
52 lbs. sodium silicate solution (Sp. Grav. 1.3)
20 lbs. additional water

Likewise a formula employing cryolite may be as follows:

FORMULA 3

2000 lbs. quartz
20 lbs. cryolite (sodium aluminum fluoride) (powdered)
28 lbs. red iron oxide
52 lbs. sodium silicate solution (of spec. Grav. 1.3)
20 lbs. additional water

An alternative of formula No. 1 above may be as follows.

FORMULA 4

2000 lbs. quartz
40 lbs. feldspar (powdered)
16 lbs. iron oxide
14.4 lbs. sodium aluminate

I have obtained successful results with kaolin and sodium dichromate in the following proportions:

FORMULA 5

2000 lbs. quartz
20 lbs. kaolin
28 lbs. sodium dichromate (affords color to cement)
40 lbs. water

From the foregoing formulae it will be observed that the ingredients feldspar, (an alumino-silicate of Na, K, Ca, etc.), cryolite ($Na_3\,Al\,F_6$), kaolin, etc, all contain metal oxides or compounds of similar metals, e. g. of aluminum. Cryolite, which is a sodium aluminum fluoride, may be viewed, to some extent, as a substitute for certain aluminates in the final coating of the particles or granules in that a metal oxide radical is replaced by a metal guoride radical. However, this analogy is only partial and it should be observed that cryolite has some properties, e. g. for use with kaolin and/or sodium silicate as illustrated above, which cannot ordinarily be supplied by aluminates, for example. In this respect the fluorine apepars to be an important element. The following, which may be viewed as a
32 composite of Formulae 1 and 3, amplifies the above illustrations of the advantages in a coating composition of a compound of fluorine such as cryolite.

FORMULA 6

2000 lbs. granules (silicious granules, such as greystone, stone, etc.)
26 lbs. ultramarine blue (Pigment)
16 lbs. kaolin
4 lbs. cryolite
72 lbs. sodium silicate solution.
4 lbs. water

The sodium silicate solution of Formula 6 had a specific gravity of 1.4 and a ration of Na_2O to SiO_2 of 1 to 3.22.

The water in the above formula is for the purpose of facilitating the mixing of the granules and coating composition and may accordingly be varied as desired.

After mixing the above formula to completely coat the granules with the coating materials, the same is then fed into a rotary kiln, for example, where it is dried and then brought up to a temperature of about 1050 degrees F., which is sufficient to induce the desired solid phase reaction and coating. At this temperature fusion of the coating materials is not effected. Where it is desired to employ this coating in a fused state, as may be desired when certain reaction products of zinc compounds and iron salts, or of iron compounds and chromium compounds, chrome oxide, etc., are employed as pigments, higher temperatures such as, for example, 1500 degrees or 1600 degrees F., or the like, must be employed and the proportions of the ingredients may be varied somewhat, if desired, though this is not essential.

In fact that Formula 6 can be heat reacted at about 1050 degrees F., or even somewhat lower, is an important factor in manufacture in that this lower temperature is more economical from a heat standpoint and also lessens the insulation problem and makes working conditions more pleasant.

Further, where certain pigments are employed,
33 such as the ordinary commercial ultramarine which
is advantageous (and sometimes almost imperative if these materials are to be employed) to avoid relatively high temperatures. Commercial ultramarine blues, while they give very satisfactory results in my process, e. g. at temperatures of the order of 1050 degrees F., I have found that they lose their color strength rapidly when heated much above about 1200 degrees F. and preferably should be kept below the latter temperature.

A still further alternative formula employing the ingredients in the foregoing Formula 5 may be as follows:

FORMULA 7

2000	lbs. granules (quartz, etc.)
60	lbs. kaolin
40	lbs. sodium dichromate
40	lbs. water

The mixture of the Formula may be fired at a temperature of about 1550 degrees to 1850 degrees F. (approximately 850 to 1000 degrees C.), preferably in a reducing atmosphere. This treatment causes the sodium dichromate to break down and form chrome oxide and soda, the kaolin being dehydrated. Thereupon the soda reacts with the quartz granules and the dehydrated kaolin to form a hard, waterproof and weather-resisting cement containing chrome oxide as a pigment. The mixture, where fired below 1000 degrees C., does not become fused, and, therefore, does not form a glaze.

In the form of one ton of coated granules I prefer to employ about 60 lbs. of kaolin per ton, and the coating produced may be likened to a colored clay slip or engobe which, upon being fired below a glazing temperature, produces a pitted film on the relatively non-porous base granule. Where such a film is made relatively thin it may be porous, in part at least, but in any event leaves a rough external surface which facilities the retention of the
34 granular material in a roofing sheet.

This form of coating possesses distinct advantages in that it aids the adhesion of the granule to an asphalt base roofing material. The base granule being relatively non-absorptive, and the coating being pitted, or, for some purposes, even porous, provide a composite which is non-blistering and non-staining. Blistering may be caused in asphalt roofing or the like by virtue of the absorption of water in porous granules and the subsequent vaporization of this water by the sun's heat, thus producing a blistering of the asphalt. Staining of shingles made by prior methods employing porous granules is apparently caused by the absorption of the light oils from the asphalt into the capillaries of the porous granules, with resultant discoloration of the shingles.

This form of the invention does not possess these defects, inasmuch as the non-porous granule prevents moisture entering the capillaries of the granule, and yet the pitted or porous coating provides the desired roughness on the external surface which facilitates retention of the coated granules in a bituminous or asphalt coated shingle.

Formula 6, Formula 1 and Formula 3 represent coating compositions of great importance and, of these, a composition as illustrated by Formula 6 is outstanding. However, though generally less advantageous than those just mentioned, the following formulae have utility and may be employed.

FORMULA 8

2000 lbs. granules (quartzite, slate, etc.)
40 lbs. kaolin
20 lbs. red iron oxide (pigment)
14 lbs. sodium aluminate
40 lbs. water

FORMULA 9

2000 lbs. granules (quartzite, igneous rock, etc.)
40 lbs. kaolin
40 lbs. sodium silicate (powdered)

20 lbs. red iron oxide
14 lbs. sodium aluminate
40 lbs. water

FORMULA 10

2000 lbs. granules
40 lbs. cryolite
40 lbs. kaolin
20 lbs. red iron oxide
40 lbs. water

FORMULA 11

2000 lbs. granules
40 lbs. feldspar
16 lbs. red iron oxide
14.4 lbs. sodium aluminate
40 lbs. water

FORMULA 12

2000 lbs. granules
40 lbs. feldspar
40 lbs. solid, powdered sodium silicate
20 lbs. red iron oxide
14 lbs. sodium aluminate
40 lbs. water

In a coating operation employing any of formulae 8, 9, 10 or 11, temperatures of the order of 1800 degrees F. may advantageously be used where a solid phase type of reaction of the coating ingredients is desired (i. e. absence of fusion). Where a pigment other than Fe_2O_3 is employed, or sintered coating is desired, higher temperatures will be employed. Where Formula 12 is used, coating may be effected at temperatures of the order of 1500 degrees F., or higher where incipient fusion or actual fusion of the coating ingredients of Formula 12 is desired. Incipient fusion will begin at about 1600 degrees to 1650 degrees F.

Formula 8 illustrates a kaolin-sodium aluminate type of coating composition while Formula 9 illustrates a kaolin-sodium aluminate-sodium silicate type of coating material, the latter preferred over the former. Formula 10 shows kaolin and cryolite in admixture.

Formula 11 shows feldspar and sodium aluminate
36 in admixture, while Formula 12 shows sodium silicate in admixture with these two ingredients or reactants.

It will also be understood that the sodium silicate, sodium aluminate and sodium dichromate ingredients specified herein may be characterized as of a group of alkali-bearing components and serve to be reacted upon by the metallic oxide containing ingredients to produce an insoluble coating.

It will be understood, of course, that, while I have specified a sodium silicate of a certain specific gravity and have also specified one example of the proportions of sodium silicate to kaolin, and to pigment, this formula is subject to variation to suit different conditions and to attain different tones of coloring desired.

It is to be understood that the temperature range is also subject to variation as desired but that care should be taken, in producing the reaction by heat between the clay and sodium silicate, that an actual fusion of the mixture forming the coating is not produced, as the avoidance of fusion prevents impurities in the base granule from being released ,which would cause their entrance into the coating and resultant effect on the color tone produced.

The granules mentioned in the above formula may be considered to be of such size that they will pass a "10-mesh" screen but be retained on a "35-mesh" screen. However, smaller or larger granules may be employed, but, for similar results, the amounts of the coating ingredients should be varied with variations in the surface area of each ton or unit weight of granules.

As distinguished from prior art known to me, my invention produces an insoluble and weather-resisting coating which is of an insoluble and weather-resisting character
throughout its entire depth, whereas in the prior art
37 known to me there is produced merely a skin effect,
and the coatings of the prior art are not possessed
of the character of insolubility throughout their entire depth.

Apparently in my process, dehydration of the mixtures including sodium silicate, sodium aluminate and/or sodium dichromate takes place short of actual fusion of said mixtures and, at the same time, one or more of these materials react with the kaolin-like material or feldspar, as the case may be, by combination, to form an insoluble sodium aluminum silicate which is a distinct chemical reaction as produced according to my invention and not to be found in the prior art known to me.

The product of a metallic oxide-containing component and an alkali-bearing component, for example, kaolin and sodium silicate or feldspar and sodium aluminate as disclosed by me, may be of variable composition, the insolubility or resistance to weather being a function of this composition.

In some instances where this invention is employed as a coating for granulated slate, it may be desirable to make certain changes in the proportions, inasmuch as slate itself contains some clay, but the amount of clay contained in slate is not sufficient to react with the sodium silicate or sodium aluminate to render the same insoluble for coating individual granules. On the other hand, I have found that the small amount of argillaceous dust present with slate is in no way detrimental to the coating as applied according to my invention.

For use with a slate, dolomite or marble granule
38 I have successfully employed the ingredients and
their proportions as follows:

FORMULA 13

2000 lbs.	slate
20 lbs.	Kaolin
16 lbs.	red iron oxide
52 lbs.	sodium silicate solution Sp. G. 1.3

The above formula is similar to Formula 1 above except for the base granule here specifically illustrated. Where translucent granules, such as quartz, etc., are employed, the quantity of pigment may often advantageously be increased somewhat, as, for example, to about 28 lbs. per ton of granules.

It will be understood that in the case of slate the formula last mentioned above may be varied as desired, depending upon the porosity of the slate.

Dolomite and marble are suitable for my purposes, it being understood, however, that if these base granules are employed they must be of a character which will withstand the temperatures necessary for roasting. I have found that alkaline earth carbonates do not, by themselves, render sodium silicate sufficiently insoluble to be used as a coating. In the case of base granules such as quartzite, kaolin, or its equivalent, is found to be particularly advantageous in order to obtain a permanent and insoluble color-bearing coating.

From the foregoing it will be observed that my improved process may involve the following illustrative steps:

(1) wetting the quartz granules with an aqueous solution of an alkali-bearing material such as sodium silicate, sodium aluminate or sodium dichromate;

(2) adding a metallic oxide-bearing component, such as clay or its equivalent and/or cryolite, and a pigment in desired proportions thereto; and

(3) then applying heat at least above the de-hydration
temperature of the coating mixture, usually above
39 850 degrees F, but regulating the degree of heat be-
low the fusing point of the coating mixture, preferably below 1450 degrees F, so as to produce a reaction between the sodium silicate and clay or sodium aluminate and feldspar to produce substantially a sodium aluminum silicate. By this reaction the entire coating of each granule throughout the depth of the coating is rendered waterproof, insoluble and weather-resisting.

In the case of the employment of sodium dichromate as the alkali containing component, it may be desirable to go to higher temperature limits to produce the required reaction and render the coating insoluble. The temperature may be kept below the fusion point of the mixture, especially where, for example, kaolin or the like is used in relatively high proportion; or temperatures above the fusion point of the coating may be employed where relatively small amounts of kaolin or the like are used.

I have also discovered that I am enabled to obtain satisfactory results by employing a combination of sodium chromate and sodium silicate together with clay. Heretofore difficulty has been encountered in incorporating sodium dichromate and sodium silicate in the same glaze coating, inasmuch as sodium dichromate and sodium silicate, when introduced into the same mixture, react so that the sodium dichromate, giving an acid reaction, gels the sodium silicate. I overcome this difficulty by employing sodium chromate which readily mixes with sodium silicate without gelling the silicate. I have found that a formula incoporating these ingredients in the proportions by weight for coating approximately one ton of granules may be as follows:

FORMULA 14

2000 lbs.	quartz
60 lbs.	kaolin
40 lbs.	sodium chromate
30 lbs.	sodium silicate solution
40 lbs.	water

The advantages of employing the sodium silicate in the last formula appearing above is that the combining or cementing of the clay and the sodium chromate to the base granule during the initial drying and firing process is increased and, for some purposes, gives better ultimate results in the color-bearing coating than in that employing a sodium dichromate and clay alone.

By way of recapitulation, in employing coating compositions in which sodium silicate and kaolin are solely the essential reactants, and are present in such proportions as are illustrated hereinabove by Formula 1, for example, it is desired to avoid fusion of the coating ingredients during the coating process, both in the interest of simplifying the coating process and also in the interest of producing satisfactory granules at low cost.

While hereinabove my invention has been illustrated by various formulae and other illustrations, and further while my invention has been illustrated to a great extent in connection with granules having a coating of the unfused, solid phase reaction type, it will be understood that this invention is not to be limited by such illustrations. In fact it has been pointed out that coating compositions as shown in certain of the formulae, such as **Formulae 4**, 8, 9 10 and 11, may be advantageously applied as vitrified or fused coatings. Also while it has been pointed out that cheap granular material, containing impurities may be employed as base granules, particularly where coating are applied below temperatures of fusion or incipient fusion, it will be understood that my invention also comprehends the use and the coating of translucent granules such a quartzite. Where such granules are coated with compositions as illustrated by formulae above, e. g. formula 1, the same will then provide improved adherence to photosensitive adhesives such as asphalt over extended periods of time.

41 It will be evident that the present invention as defined in the appended claims covers roofing material or the like in which reaction products of admixtures, such as illustrated by the above formulae, are used, whether the reaction product is employed with or without base granules, is being broadly contemplated that such reaction products may be embedded, as such, e. g. in comminuted form, in an adhesive binder such as asphalt or tar-like materials, where desired; or such reaction products may be employed as a continuous or interrupted coating on articles other than granules, e. g. larger articles, to beautify or weather-proof the same, or to serve other desired purposes.

All modifications and variations of this invention within the scope of the appended claims are contemplated.

While kaolin has been hereinabove employed as a prime example of blends of silica of alumina (in chemical composition) or argillaceous materials for use in coating compositions, it will be understood that other blends of silica and alumina, such as pyrophyllite, kyanite and/or even feldspar may be employed in place of some of the kaolin or may replace the kaolin entirely. Other alumino-silicates, such as Fullers earth, may also be employed.

Thus is the above formulae, e. g. in Formula 6, kaolin may be replaced in whole or in part with pyrophyllite, for example, and the cryolite may be replaced in whole or in part by sodium silico-fluoride or the like. While the sodium silicate of this coating composition (e. g. Formula 6) may be replaced in part, if not entirely, by other silicates, it is generally preferred to employ inorganic silicates and especially alkali metal silicates. Of the alkali metal silicates, sodium silicate is the most practical and also possesses particular advantages, especially where temperatures below fusion are employed in the coating operation, inter alia, in providing a good continuous and dense coating.

Another important characteristic of cryolite (Na_3
42 Al F_6), and of such substitutes as sodium silico-
fluoride, is that the cryolite is insoluble in water. If the cryolite were soluble in water (which it is not), it would react with the sodium silicate and precipitate it and thus the adhesive effect of the sodium silicate in the coating composition would be lost. The cryolite, being insoluble in water, allows the sodium silicate to provide its adhesive and coating functions and then (after the water has been driven from the coating ingredients which are distributed over surfaces of the granules and the granules are further heated) the coating ingredients react with each other, the cryolite (because of its acid radical) serving to neutralize the alkalinity of the sodium silicate and thus render the final coating more insoluble and weather-resistant. There are indications that the cryolite or equivalent may also serve to some extent as a catalyst to foster this desired reaction between the kaolin or equivalent and sodium silicate.

43 WHAT I CLAIM IS:

1. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof including the reaction product of a water-soluble, adhesive film-forming alkali metal compound and a substantially water-insoluble fluorine compound of a metal, adapted to inhibit the formation of bloom-producing constituents, which latter will react with the said film-forming adhesive at temperatures below incipient fusion to form a water-insoluble coating on said individual granules.

2. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof including the reaction product of a water-soluble, silicious film-forming material and a heat-reactive, substantially water-insoluble compound of aluminum, adapted to inhibit the formation of bloom-producing constituents, latter will react with said silicious film-forming material below temperatures at which incipient fusion of the same will take place, said coating being of an unfused nature resulting from a solid phase reaction.

3. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof comprising the reaction product of a water-soluble silicate and a substantially water-insoluble compound of silicon along with a substantially water-insoluble compound of aluminum, said reaction product comprising a dense, substantially water-insoluble complex alumino-silicate resulting from the interreaction of the aforementioned water-soluble reactants.

4. As a new article of manufacture, a comminuted or

granular material having a weather-resisting coating or individual granules thereof comprising the reaction product of an alkali metal silicate, a clay material which if burned would form a substantially white or colorless mass and a water-insoluble compound of aluminum, said coating being a dense, weather-proof material.

5. As a new article of manufacture, a comminuted
44 or granular material having a weather-resisting coating or individual granules thereof comprising the reaction product of sodium silicate, clay and cryolite.

6. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof comprising the reaction product of sodium silicate, a kaolin and cryolite, the sodium silicate being water-soluble and the kaolin and cryolite being substantially water-insoluble and the sodium silicate, on a dry basis, being present to a greater extent by weight than the said kaolin and cryolite.

7. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof comprising the reaction product of sodium silicate, a clay and cryolite, the sodium silicate being water-soluble and the clay and cryolite being substantially water-insoluble and the sodium silicate, on a dry basis, being present to a greater extent by weight than the said clay and said clay being present to a greater extent by weight than said cryolite.

8. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof comprising the reaction product of a sodium silicate solution, a clay which is substantially water-insoluble and a water-soluble fluorine compound of an alkali metal containing a substantially wa-

include a flux and such exclusion of flux is a material limitation which cannot be disregarded.

Claim 49 is rejected as too broad and indefinite in "heating, to a temperature upwards of 850 degrees F". This
recitation includes temperatures so high as to fuse the base
granule and agglomerate the mass. Applicant therefore is
not entitled to an interference on this claim because
49 it is unpatentable. Furthermore, the temperature
range of 1600-1700 degrees F. of corresponding
Claim 2 of the Hillers patent is a material limitation because Hillers produces in every case a fused coating, whereas as applicant has shown a temperature of 850 degrees F. may produce an unfused coating. Accordingly the broad temperature range may cover a different invention from that of Hillers.

Claim 50 is rejected as indefinite and drawn to new matter in a "temperature of the order of 1600 degrees F". In the first place, there is no verbal basis in the disclosure for this limitation. Secondly, it is not known what the exact range of temperature covered by this recitation may be. Therefore since the claim is unpatentable and also since it may read on temperatures lower than fusion which is critical in Hillers, applicant is not entitled to an interference on this claim.

Claim 51 is rejected as Claims 41 and 42, supra, i. e. as unpatentable over Gundlach. Making Gundlach's process a wet process would involve no invention. Applicant is not entitled to an interference on this claim for reasons similar to those given in denying the right to an interfernce on Claims 41 and 42. Furthermore, the use of the term "heat reaction product" covers both the fused and unfused coatings shown by applicant whereas Hillers is limited to a fused coating.

Claims 52 and 56 are allowable to applicant but cannot form a basis for an interference with Hillers because of the term "heat reaction product" which covers an unfused coating. Hillers' coating is limited to a fusion product.

Claims 54, 55, 58 and 59 are subject to rejection as being for new matter in that they call for both a flux and liquid
adhesive whereas applicant has disclosed only the
50 latter. It is not apparent as applicant contends that
the sodium silicate act as a fluxing agent as well as
a liquid adhesive. Accordingly, applicant cannot make these claims of Hillers since there is no basis therefor in his original disclosure. In addition, Claims 54 and 58 cannot be made interference counts because of the term "heat reaction product", as explained above.

In view of the fact that applicant can make Claims 13 and 18 of Hillers, no necessity is seen for the addition of claims presenting limitations, material or otherwise, over the claims of Hillers.

An interference will be promptly declared between the instant case and Claims 13 and 18 of the Hillers patent.

If applicant further desires to contest his rights to make the claims not include in the declaration of the interference, applicant may proceed under Rule 109.

S. LEVIN
Acting Examiner.

51 Mailed May 27 1940

DEPARTMENT OF COMMERCE
UNITED STATES PATENT OFFICE
WASHINGTON

Please find below a communication from the EXAMINER in charge of this application.

CONWAY P. COE
Commissioner of Patents

Applicant: Clifford L. Jewett

Ser. No. 233,293
Filed Oct. 4, 1938

For COLORED GRANULATED MATERIAL

Paul Carpenter,
140 South Dearborn Street,
Chicago, Illinois.

Responsive to amendments filed September 28 and November 24, 1939 and April 19, 1940:

References added:

Todd	796,164	Aug. 1, 1905	106-19
Tilton	1,555,086	Sept. 29, 1925	51-280 F
Muirhead (Br.) 1 sht.)		14,934 of 1894	106-30
Baggs	1,959,149	May 15, 1934	91-72

It is found that there are four distinct ultimate species in this case as follows:

A. Claims 5-7, 18, 19, and 40 for a reaction product of sodium silicate, cryolite and kaolin (Ex. 6).

B. Claims 60 and 61 for a reaction product of sodium silicate and feldspar (Ex. 2 and Ex. 12)

C. Claims 14, 29, and 47 for a reaction product of sodium aluminate and clay (Exs. 8 and 9), and

D. Claims 37 and 39 for a reaction product of a "basic flux", sodium silicofluoride and "fusible silica bearing material"; these claims read only on Ex. 6 as modified by the last paragraph on page 20, wherein the "basic flux" is sodium silicate and the fusible siliceous material is kaolin.

There is no allowable generic claim; election of a single species is therefore required. Since groups A and C were original claims and received action, the election of a single

species must be confined to one of these groups, since the
Ser. No. 233,293
52 original presentation and action constitute an election of A and C.

Species B and D (claims 37, 39, 60, and 61) were not originally presented, and are rejected as directed to nonelected species, no allowable generic claim being present.

Claims 1, 2, 11, 17, 20-25, 30, 31, and 63-69 may be retained with any group.

Claims 3, 4, 8-10, 41-46, 49-59, 62 and 70 may be retained only with species A.

Claims 12, 13, 15, 27 and 28 may be retained with either of species A and C.

Claims 26, 32-36, 38, and 71-75 may be retained with either of species A and D.

Claims 1, 2, 11, 17, 24, 25, and 63-69 are rejected as failing to properly define the alleged invention since they are indefinite and unduly broad. The disclosure does not provide sufficient basis for the use of such broad and indefinite terms as "water-soluble metalliferous film-forming adhesive", or "water-soluble siliceous film forming material", and "water-insoluble compound of a metal" "water insoluble compound of silicon", "water insoluble compound of aluminum" "aluminiferous material", "alumina contributing material". It is not seen that all such substances are within the scope of applicant's invention.

Claim 11 is also functional and alternative in the definition of the insolubilizer. Claim 17 is also alternative in the expression "compound or compounds".

Claims 20-23, 30 and 31 are rejected as obviously informal.

Claims 63 and 64 are further rejected as containing new matter; there being no original disclosure that the sodium silicate coating partially dries before the "alumina-contributing material" is added.

Ser. No. 233,293

53 Claims 1, 11, 17, 24, and 63-69 are further rejected as substantially met in Gundlach who discloses the application to granules of a coating containing feldspar cryolite and sodium silicate (lines 8 and 9, column 2, page 1, and line 3, column 1, page 2) followed by fusion of the coating. Claim 1 is not limited to an unfused coating.

Claims 1, 11, 17, 24, 63-66 and 68 are further rejected as substantially met in Nicholson, Tilton or Muirhead who apply mixtures of sodium silicate and clay to granules and then fire the mxtures. What is meant by an article "in the nature of a roofing element" (claim 17)?

Claims 1, 2, 11, 24, 25, and 63-69 are further rejected as unpatentable over Todd in view of Walton; to apply Todd's sodium silicate-hydrated aluminum silicate coating to mineral granules as shown by Walton instead of to mineral fibers involves nothing patentable.

Claim 17 is further rejected as fully met in Todd.

Claims 1, 11, 17, and 24 are further rejected as unpatentable over Baggs; to glaze granules with Bagg's composition is not inventive.

Claims 12, 13, 15, 27, and 28 are repected as unduly broad, vague and indefinite in the term "alkali metal compound of aluminum". The only such reactants for the clay disclosed by applicant are sodium aluminate and possibly cryolite; this does not entitle him to claim any alkali metal aluminum compound, such as feldspar, which has been disclosed as an equivalent for clay in some respects but has not been disclosed as reacting with the clay.

Claims 12, 13, 15, 27, and 28 are further rejected as unpatentable over Todd in view of Walton. At some stage in the reaction Todd's coating mixture will contain sodium aluminum silicate and clay.

Claims 72-75 are so much broader than claims 1

54 and 2 of the Ward patent that it is not seen that they can be considered the basis for an interference with Ward under the doctrine of Bonine v. Bliss cited by applicant. In the opinion of the Examiner, no interference with Ward exists.

The Examiner's decision on the motion in the Jewett v. Hillers Interference 77,289 should be noted with regard to claims 41-46, 49-59 and 70. In this connection, the tentative allowance of claims 52 and 56 is withdrawn for reasons set out in that decision. Ex parte action on these claims remains suspended while interference 77,289 continues, except that in making election of one of the groups A and C. Applicant should note that upon termination of the interference he will be restricted to prosecute the elected group.

Ex parte prosecution otherwise is to continue concurrently with the prosecution of said interference.

Claims 71-75 will also be held subject to rejection as unpatentable over Hillers in the event of an award of priority adverse to applicant in the above-mentioned Interference. These claims are broad enough to include a mixture of sodium silicate and cryolite, since cryolite is both an insoluble aluminum compound and an insoluble alkali fluoride, but in terms could not have been made in Application Ser. No. 700. 632, of which this application is a continuation-in-part.

UNDER RULE 77, AS AMENDED BY ORDER NO. 3487 507 O. G. 239, THE TIME WITHIN WHICH REPLY TO THIS ACTION MUST BE MADE IN ORDER TO AVOID ABANDONMENT IS SET TO EXPIRE JULY 29, 1940.

APPROVED FOR SHORTENED PERIOD
MAY 24 1940
SUPERVISORY EXAMINER S. LEVIN

Examiner.

55 Mailed JULY 11, 1941

DEPARTMENT OF COMMERCE
United States Patent Office
Washington

Please find below a communication from the EXAMINER in charge of this application.

CONWAY P. COE
Commissioner of Patents,

Applicant: Clifford L. Jewett
Ser. No. 233,293
Filed Oct. 4, 1938
For Colored Granulated Material

Paul Carpenter
140 S. Dearborn St.
Chicago, Illinois

Responsive to amendment of May 31, 1941.

The Examiner has very carefully considered applicant's argument but is still of the opinion that claims 1 to 4, 6 to 8, 10 to 13, 15, 17, 18, 20, 21, 24 to 28, 32 to 36, 38, 40, 63 to 69, 71 to 75 are unpatentable as failing to properly define the alleged invention and as being too broad for reasons fully set forth in the last office action.

Claims 63 and 64 are again rejected as containing new matter for reasons fully set forth in the office action of May 27, 1940.

Claims 1 to 13, 15, 17 to 22, 24 to 28, 32 to 36, 38, 40, 48, 62 to 69, 31 to 77, 79 and 81 are rejected as being unpatentable over Todd in view of Walton, Nicholson or Gunlach for reasons set forth in the last office action. The fact that certain claims were allowed in other applications is no valid excuse for allowance of claims to similar subject matter in this case. As a matter of fact the Todd patent was not cited during the prosecution of the other applications. Claim 48 was intended to have been included in this rejection in the last office action.

56 Claims 1 to 13, 15, 17 to 22, 24 to 28, 32 to 36, 38, 40, 48, 62 to 69, 71 to 77, 79 and 81 are further rejected as involving no invention over Gundlach, Nicholson, Tilton, Muirhead, Boggs or Hillers in view of Todd for reasons fully set forth in the last office action.

Claims 41 to 46, 49 to 59, 70 to 75 are rejected as unpatentable to applicant over Hillers in view of the decision by the Board of Appeals in Interference No. 77, 289, Paper No. 38, which was adverse to applicant.

Claims 79 and 80 are further rejected as being too broad for reasons set forth in the Board's decision, above mentioned.

Claims 14, 16, 29, 37, 39, 47, 60, 61, 78, 80 and 82 are rejected as not being readable on the elected species.

The requested interference between Nichols Patent No. 2,061,246 and applicant in view of claims 36 to 39 is refused since these claims do not specify "porcelain frit" as set forth in the Nichols patent. Furthermore claims 7 to 10 in Nichols are far more limited than present claims 36 to 39.

Applicant's request for an interference with Hillers patent No. 2,094,452 is refused since claims 63 to 69, upon which applicant depends for forming the issue of the interference, are unpatentable to applicant for reasons above mentioned. Furthermore, these claims are not only
57 broader than claim 10 of Hillers but also are neither
copies nor substantially the same as other claims in the Hillers patent.

No interference exists between Ward 2,114,692 and applicant based on claims 71 to 75 for reasons set forth on page 4, lines 2 to 6 of the office action of May 27, 1940. Furthermore, claims 71 to 75 are unpatentable to applicant in view of the adverse decision in the Interference No. 77,289.

The requested interference based on claims 76 to 78 is refused since Hillers 2,177,389 contains only a single method claim of very limited scope. Present claims 76 to 78 are much broader than the claim in the Hillers patent. Furthermore claims 76 and 77 are unpatentable for reasons fully set forth in the last office action.

Claims 83 to 88 are drawn to a silicate cement and the process of making it. The invention originally presented in the present case was drawn to the method of manufacturing colored granules, including heating, and at no time did applicant alleged invention in a cold setting silicate cement. Consequently since claims 83 to 88 are drawn to an invention totally different and distinct from that prosecuted in the present case, they cannot be now considered. Whether or not applicant is entitled to these claims and/or an interference with Snell 2,195,586 may not properly be decided in this application. Clearly the obvious use of the
cement set forth in claims 87 and 88 will not give the
58 heat reaction product (whether fused or unfused)
as called for in all the other claims in this case.
Claims 83 to 88 are therefore rejected as being drawn to an invention different from that originally elected.

The rejection of all the claims in this case is made *final* under Rule 68.

The final rejection herewith closes the prosecution of the case before the Primary Examiner. Any amendment or request for reconsideration or which on inspection is found to require reexamination of the case will not be entered, but if promptly filed, may be given consideration a reasonable time prior to the expiration of the statutory period. (See Ex parte Peterson 1928 C. D. 31.)

C. F. KRAFFT
Examiner

59 U. S. Patent Office Sep 17, 1941

IN THE UNITED STATES PATENT OFFICE

Division 38, Room 3084

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938
For: COLORED GRANULATED MATERIAL

AMENDMENT

Honorable Commissioner of Patents
Washington, D. C.

Sir:

Kindly amend this application by cancelling claims 83 to 88 inclusive, without prejudice, and inserting the following new claims, for purposes of allowance and/or interference:

89. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble silicate, and a slightly soluble fluosilicate adapted to react with the silicate with neutralization of the alkali, and then drying the granules, the proportions of said fluosilicate in relation to the soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

90. The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

91. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

92. As a new article of manufacture, roofing granules of the class rescribed having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of pigment and the reaction prouct of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

93. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble alkali silicate, and a substantially water-insoluble alkali metal compound of fluorine, adapted to react with the silicate with neutralization of the alkali, and then drying the granules, the proportions of said metal compound of fluorine in relation to the soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

94. The method of coloring granular material comprising spreading coloring agent, a substantially water-insoluble alkaline metal compound of fluorine, and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

95. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of a sub-

stantially water-insoluble alkaline metal compound of fluorine and sodium silicate, and being substantially free from water-soluble salts of sodium.

96. As a new article of manufacture, roofing
61 granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of pigment and the reaction product of a substantially water-insoluble alkali metal compound of fluorine and sodium silicate, and being substantially free from water-soluble salts of sodium.

97. Roofing sheets surfaced with the article of claim 96.

REMARKS

Claims 89, 90, 91 and 92 are a verbatim copy of claims 1, 5, 8 and 9 respectively, of Veazey patent No. 2,215,600 filed March 7, 1935 issued September 24, 1940; while claims 93, 94, 95 and 96 are similar to said claims 1, 5, 8 and 9 with the exception that the silico-fluoride (i. e. fluosilicate) is generically defined so as likewise to cover the Applicant's other comparable fluorides, i. e. slightly soluble (substantially insoluble) alkaline metal compounds of fluorine, such as cryolite (sodium alumino-fluoride). Claim 97 is obviously dependent on claim 96 and is drawn to the same type of article as original claim 21, that is, to roofing sheet material.

In respect to the definition of the fluorine compound in claims 93 to 96, note the comparable expressions in such claims of the present application as claim 74; also see claim 26.

An affidavit under Rule 94, executed by the Applicant, is

also enclosed herewith. This affidavit is filed without prejudice to Applicant's position: disclosures bearing closely upon the claims herein copied from the Veazey patent and supporting the generic claims 93 to 96, as well as claim 97, appears in Applicant's parent application S.
N. 700,632, filed December 1, 1933 (more than 15
62 months prior to the filing date of the aforesaid Vea-
zey patent). On page 10 of Applicant's said parent application S. N. 700,632, a composition for coating roofing granules is disclosed which is made up of aqueous sodium silicate and cryolite, as well as a pigment. (Cryolite is sodium alumino-fluoride.) Said formula also appears in the present application on page 10, where it is designated as "Formula 3". On page 21, lines 1 to 3 of the present application (filed October 4, 1938), it is pointed out that sodium silico-fluoride may be substituted in place of cryolite in the coating of roofing granules according to the invention described, viz as a reactant for sodium silicate.

Thus it will be seen that the present Applicant has disclosed the coating of roofing granules with sodium silicate and a reactant therefor, said reactant being either of the illustrative materials sodium alumino-fluoride (i. e. cryolite) or sodium silico-fluoride, or comparable substantially water-insoluble alkaline metal compounds of fluorine. Both sodium alumino-fluoride and sodium silico-fluoride are substantially water-insoluble fluorides, i. e. are very slightly soluble.

Attention is called to original claim 35 of this application in relation to the claims presented in this amendment; especially compare it with article claims 91, 92, 95 and 96. It calls for roofing granules having a weather-resistant coating comprising "the reaction product of an insoluble fluoride and alkali metal silicate and a coloring agent". It will be clear that the expression "an insoluble fluoride'' comprises both sodium alumino-fluoride (i. e. cryolite) and also sodium silico-fluoride. Also note other claims of the present application such as original claims 8, 9, 11, 17, 18, 19, 32 33 and 34 as well as claims 36 to 40 which appear in amendment dated November 17, 1938.

63 By referring to the specification at page 4, lines 13 and 14, it will be noted that one of the defects of prior art granules which the present invention was designed to overcome was their ''tendency to blooming''. Special attention is also drawn to the specification at page 5, line 9 from the bottom, where the reaction product of 'sodium silicate and cryolite'' is specifically mentioned. Taken in connection with the specification at page 21, lines 1 to 3, this is of course also a disclosure of the reaction product of sodium silicate and sodium silico-fluoride. The disclosure at the end of page 20 and top of page 21 is also, of course, to be noted in connection with Formula 3, page 10, of the present specification. Said formula, as above stated, also appears in the parent application S. N. 700,-632, filed December 1, 1933.

It will be noted that in claim 1 of the Veazey patent, the patentee has chosen to characterize sodium silico-fluoride and like fluoride compounds as 'a slightly soluble fluosilicate'', etc. It will be seen that this is simply another way of saying a substantially water-insoluble fluosilicate. Furthermore it will be clear that both characterizations are of the same material in any event.

Attention is also called to the last full paragraph on page 20 of the specification where it is stated again that ''the cryolite may be replaced in whole or in part by sodium silico-fluoride or the like''.

In claim 1 of the Veazey patent the fluosilicate is further characterized as ''adapted to react with the silicate (i. e. the soluble silicate) with neutralization of the alkali''. In this connection note the present specification at page 21, lines 13 to 15, taken in connection with lines 1 to 3 on the same page; also note such original claims as claim 11 which specifies that the finished coating is substantially

> non-alkaline and non-blooming in nature and is
> 64 dense and substantially water-insoluble''. Additionally note, for example, claims 36 and 37, each of

which states that the granule coating is ''substantially free from tendency to effloresce'', i. e. is non-blooming. In connection with other provisions of method claim 1, note the first two paragraphs on page 8 of the present application which illustrates a coating procedure which is applicable to any of Formulae 1, 2, 3, etc. Formula 3 is the formula disclosing both cryolite and sodium silicate, and as before stated, pages 20 and 21 of the specification make it clear that sodium silico-fluoride may be substituted for cryolite.

From the above remarks it will be clear that each of claims 89, 90, 91 and 92, i. e. claims 1, 5, 8 and 9 of the the aforesaid Veazey patent, are allowable to the present Applicant. Their allowance is accordingly solicited and it is requested that an interference be set up between said claims and the corresponding claims of said Veazey patent No. 2,215,600 at an early date. Allowance of the other claims presented is also requested. In respect to claims 93, 94, 95 and 96, either these claims should be indicated as allowable to the Applicant on an interference with the Veazey patent should be set up thereon, under the doctrine of Bonine v. Bliss, 1919 C. D. 75 and In re Ellis 47 F. (2d) 963 (CCPA 1931). However it is believed that the proper action is to allow claims 93 to 96 without an interference.

Respectfully submitted,

CLIFFORD L. JEWETT
By Paul Carpenter,
His Attorney

September 13, 1941
HJK:D

IN THE UNITED STATES PATENT OFFICE

65 Div. 38 Room 3804

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938

For: COLORED GRANULATED MATERIAL

AFFIDAVIT UNDER RULE 94

STATE OF MINNESOTA
ss.
COUNTY OF RAMSEY

CLIFFORD L. JEWETT, being duly sworn, according to law, deposes and says: That he is the same Clifford L. Jewett who, on or about October 4, 1938 filed the above identified application Serial No. 233,293, and also the same Clifford L. Jewett who, on or about December 1, 1933 filed the parent application Serial No. 700,632; deponent further states that he has considered the Amendment dated September 13, 1941, containing claims 89 to 97 inclusive and verily believes that he is the original, first and sole inventor of the subject matter of each of said claims; deponent further states that he has studied Patent No. 2,215,600 of Marion H. Veazey, issued September 24, 1940 on an application filed March 7, 1935, and, as to claims 1, 5, 8 and 9 of said patent, copied into his aforesaid application Serial No. 233,293 as claims 89, 90, 91 and 92, respectively, by the aforesaid Amendment dated September 13, 1941, deponent avers that he made the invention defined in said claims long prior to March 7, 1935 (the filing date of the Veazey application on which the aforesaid Veazey patent issued). As to the other claims of said Amendment, viz. claims 93 to 97, deponent states that his said parent application Serial No. 700,632 clearly shows that he made the invention defined in said claims, and reduced the same to practice, at least as early as December 1, 1933. Further deponent sayeth not.

CLIFFORD L. JEWETT

Subscribed and sworn to before
me this 13th day of September, 1941.
HARRIET R. DABLOW
Notary Public.
Harriet R. Dablow, Notary Public, Ramsey County, Minn.
My Commission expires March 18, 1947.
(SEAL)

66 Mailed Sep 30 1941

DEPARTMENT OF COMMERCE
United States Patent Office
Washington

Please find below a communication from the EXAMINER in charge of this application.

CONWAY P. COE
Commissioner of Patents,

Applicant: Clifford L. Jewett
Ser. No. 233,293
Filed Oct. 4, 1938
For Colored Granulated Material

Paul Carpenter
140 S. Dearborn St.
Chicago, Illinois

The proposed amendment of Sept. 16, 1941 has been received but not entered. Claims 89, 91 and 92, which are copied claims 1, 8 and 9 respectively of Veazey patent No. 2,215,600, are not properly enterable in this case since no basis is seen in the present application for these claims. There is no original disclosure pointing out that the proportion of fluosilicate to soluble silicate is sufficient to produce granules substantially devoid of free alkali and water-soluble salts (claim 89), or that the coating is substantially free of water-soluble salts of sodium (claims 91 and 92).

Claims 89 to 92 are drawn to a non-elected species since applicant has elected to prosecute claims to species A as set forth in the office action of May 27, 1940, Paper No. 20. Species D includes the fluosilicate reactant, claims to which were finally rejected in the Office action of July 11, 1941 as being drawn to a non-elected species. As set forth in the Office action of Nov. 19, 1940, and as tentatively elected in applicant's response of Dec. 28, 1940, the elected species
is drawn to Group A. Therefore, in view of the un-
67 patentability of any generic claim applicant cannot
now present claims to a non-elected species even for
the purpose of interference.

Claims 89 to 92 are further refused entry on the ground that the disclosure is not sufficiently clear and adequate to support claims to the fluosilicate reactant. The bald statement on pages 21, lines 1, 2 and 3 that sodium silicofluoride may be a substitute for cryolite is insufficient for claiming specifically the mixture of pigment, alkali-metal silicate and sodium fluosilicate. No example includes the fluosilicate and none can be imputed because of the statement that, broadly, sodium silico-fluoride may be a substitute for the cryolite.

Claims 93 to 97 are refused entry since prosecution of this case is closed. These claims are broader than those copied from the Veazey patent and therefore cannot be considered.

The date of abandonment runs six months from July 11, 1941.

D ARNOLD
Acting Examiner

68 U. S. Patent Office Dec 24 1941 Division 38
Mail Division U. S. Patent Office Dec. 23 1941

IN THE UNITED STATES PATENT OFFICE
Division 38 Room 3084

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938
For: COLORED GRANULATED MATERIAL

AMENDMENT

Honorable Commissioner of Patents
Washington, D. C.

Sir:

This is in response to Office action dated July 11, 1941. It is also a request that the Examiner kindly reconsider and revise the position stated in Office action of September 30, 1941, in respect to Applicant's claims 89 to 97.

To simplify the issue of this case and to place the claims in better condition for allowance or appeal kindly enter the following amendments:

Kindly cancel, without prejudice, claims 12, 13, 14, 15, 16, 27, 28, 29, 32, 33, 34, 43 - 46, 47, 48, 60, 61, and 63 to 69, inclusive.

Claims 1 to 11 inclusive, line two of each, after "granular material" insert—adapted for use as roofing granules—.

Claim 3, line 9, cancel the period and add—at substantial superatmospheric temperatures, above the dehydration point of said soluble silicate but below temperatures at which a fused, glazed coating would be produced, said coating being substantially free of water soluble alkali-metal salts and substantially free of tendency to bloom. —

Claim 4, line 3, before "reaction" insert—in situ formed—; line 7, after "being" insert—produced at a substantial superatmospheric temperature, but not in excess of about 1600 degrees F., and being—; same line, change the period to a comma and add—which is substantially free of water-soluble alkali-metal salts and substantially free of tendency to bloom. —

69 Claim 5, line 3, before "reaction" insert—in situ formed —; line 5, change the period to a comma and add—said reaction product being produced at a substantial superatmospheric temperature but below those temperatures which would cause a sticking together or agglomeration of the granules, said coating being substantially free of water-soluble salts of sodium and substantially free of tendency to bloom.—

Claim 6, line 3, before "reaction" insert—in situ formed—; line 9, change the period to a comma and add—said reaction product being produced at a superatmospheric temperature, above the dehydration point of said sodium silicate but below temperatures at which a fused, glazed coating would be produced.—

Claim 7, line 2, before "coating" insert—unfused, unglazed ceramic—; line 3, before "reaction" insert—in situ formed—; line 10, change the period to a comma and add—said coating being produced under superatmospheric temperatures sufficiently high to insolubilize said silicate but below temperature at which the coating would be a fused glaze.—

Claim 8, line 6, after “metal” place a comma; line 10, change the period to a comma and add—said coating being produced in situ on surfaces of said granules at superatmospheric temperatures, above the point of dehydration of the sodium silicate but below temperatures which would yield a fused, glazed coating.—

Claim 9, line 4, after “at” insert—substantial superatmospheric—; same line, after “temperatures” insert—above the dehydration point of said sodium silicate but—

Claim 10, lines 4 and 5, cancel “of a kaolin-like
70 material” and substitute—comprising clay—; line 6,
after “fluorine” place a comma and insert— and a
coloring agent,—

Claim 17, line 2, before “coating” insert—and substantially non-blooming.—

Claim 18, line 3, before “heat” insert—in situ formed—; line 4, after “product” place a comma and insert—produced at a substantial superatmospheric temperature but below 1450 degrees F.,—

Claim 19, line 3, before “heat-” insert—unglazed—; line 4, after the second comma add—produced at a temperature above the dehydration point of the sodium silicate,—

Claim 20, revise line 4 to read—in claim 7.—

Claim 40, lines 1 and 2, cancel “a material of the nature of”—

Kindly add the following new claim:

98. As a new article of manufacture, artificially colored coated roofing granules having on the exterior thereof a substantially non-blooming, insoluble coating, produced at a substantial superatmospheric temperature, said coating comprising pigment and the heat-reaction product of sodium silicate, clay, and a basic metal compound of fluor-

ine, said compound being heat-reactive and substantially water-insoluble.

Claim 49, line 5, after "850 degrees F." place a comma and insert—but below temperatures at which the granules would stick together or agglomerate to substantial extent,—.

Claim 50, line 4, cancel "a" and substitute—an inorganic siliceous—; line 5, cancel "the order of 1600 degrees F." and substitute—850 degrees to 1450 degrees F.—

71 Claim 62, line 3, after "individual" insert—weather-resisting and substantially non-blooming—; line 5, change the period to a comma and add—and a coloring agent, said heat-reaction product being produced in situ on surfaces of said granules at superatmospheric temperatures of 850 degrees to 1450 degrees F.—

Claim 73, line 5, after "fluoride" and before the comma insert—of a base metal,—.

Claim 74, revise line 1 to read—The process of artificially coloring roofing granules comprising forming an—.

Claim 75, revise line 1 to read—The process of making artificially colored coated roofing granules comprising forming an—; line 9, in place of "a lithic surface" write—the lithic surfaces of granules—.

Claim 76, line 7, change the period to a comma and add—said reaction product being produced in situ on said surface of said granules at a substantial superatmospheric temperature, above the dehydration point of the sodium silicate but below temperatures which would yield a fused, glazed coating.—

Claim 79, line 3, cancel "a" and insert—an inorganic—

Claim 80, line 3, cancel "a" and substitute—an inorganic siliceous—; line 4, change the period to a comma and add—said coating being produced in situ on surfaces of said granules at superatmospheric temperature below those which would yield a completely fused coating; said superatmospheric temperatures coming within the range of 850 degrees to 1450 degrees F.—

Claim 81, line 4, change the period to a comma and add—said reaction product being produced at a superatmospheric temperature sufficiently high to insolubilize said silicate but below those temperatures which would completely fuse the coating.—

72 Claim 82, line 2, cancel "a" and substitute—an in situ formed,—; line 4, change the period to a comma and add—said heat-reaction product being produced in situ on surfaces of said granules at superatmospheric temperatures, above the dehydration temperature of the sodium silicate but below temperatures which would yield a fused, glazed coating.—

Kindly add the following claims:

99. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble alkali silicate, and a slightly soluble alumino-silicate adapted to react with the soluble silicate with neutralization of the alkali, and then drying the granules, the proportions of said alumino-silicate in relation to the said soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

100. The method of coloring granular material comprising spreading coloring agent, sodium alumino-fluoride and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

101. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating

consisting substantially of the reaction product of sodium alumino-fluoride and sodium silicate, and being substantially free from water-soluble salts of sodium.

73 102. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming insoluble coating, said coating consisting substantially of pigment and the reaction product of sodium alumino-fluoride and sodium silicate, and being substantially free from water-soluble salts of sodium.

REMARKS

A number of claims have been cancelled so as to materially reduce the total number of claims in this application and a few additional claims have been substituted which are within species A, set out on page 1 of Office action dated May 27, 1940.

New claims 99 to 102 hereof parallel claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600 (i. e. claims 89, 90, 91 and 92 hereof) *except* these new claims recite sodium alumino-fluoride, i. e. cryolite, instead of sodium silico fluoride.

Claims 83 to 88 inclusive were cancelled without prejudice by Amendment dated September 13, 1941. By the present Amendment the following additional claims have been cancelled without prejudice: 12, 13, 14, 15, 16, 27, 28, 29, 32, 33, 34, 43 - 46, 47, 48, 60, 61 and 63 to 69 inclusive. This latter group of claims is being cancelled since they are of such nature that they may more appropriately be pursued in a separate application or applications particularly in view of the election of species which has been required in the present application; reference is made to Office action dated May 27, 1940 (Paper No. 20) and to Office action dated February 26, 1941 (Paper No. 28). It will be noted that certain of the claims cancelled herefrom appear in groups B and C set out on page 1 of said Office action of May 27, 1940, while various other claims hereby cancelled, as stated by the Examiner on page 2 of that action, may be retained with group B and/or with group C.

Various of the claims have been amended to render
74 them more specific in particulars which will be evident. One reason which makes these amendments desirable is the Examiner's requirement of election of species (Rule 41) between ‘claims to the unfused coating’’ and ‘‘claims to the fused coating’’ (Page 1 of Office action of February 26, 1941), which requirement the Examiner refused to withdraw in Office action dated July 11, 1941 (which was made final), despite the fact that Applicant urged in his intermediate response dated May 29, 1941, that he did not agree that such requirement was proper. Other reasons for these amendments are to simplify the issues of this case and to modify the claims in view of certain recent decisions of the Board of Appeals concerning roofing granules, especially their decision dated October 20, 1941, (and November 18, 1941) in Appeal No. 38,935 bearing upon differences between claims to *unfused* coatings and claims to *fused* coatings.

The Examiner is asked kindly to reconsider his action on a number of the claims of this application, which are still more specific in scope than outstanding claims of patents issued upon later filed applications.

In connection with Hillers patent No. 2,070,359, which is based upon a much later filing date than that of Applicant's parent application, the Examiner's attention is especially directed to claims 79 and 80, and to claims 81 and 82 hereof, which are clearly more specific in scope than claims 13 and 18 respectively of said Hillers patent. Said claims 79, 80, 81, and 82 are supported by the parent application Serial. No. 700,632 (page 10, etc.), which has a filing date more than 15 months earlier than that of Hillers. Further in this connection it is noted that on page 3 of the final action dated July 11, 1941, the Examiner asserts that there was an "adverse decision" in respect to applicants in Jewett vs. Hillers Interference No. 77,289. This is a misconception of the decision insofar as it is applicable hereto. The fact is that there was no award whatsoever on the question of priority. The interference was *dissolved;* the question of priority was not decided against the present Applicant. Since the counts of said interference were directed to *fused* coatings, it will be understood that the dissolution of said interference does not have any adverse effect on Applican't claim 79, 80, 81 and 82 which are directed to *unfused* coatings. Reconsideration in this respect will be appreciated.

The Examiner is also asked kindly to reconsider the claims of species A (Page 1 of Office action of May 27, 1940), as they at present stand, particularly in view of what has just been said hereinabove. These claims define subject matter which is clearly novel over the prior art, and to persist in the rejection of these claims would be inconsistent with issues which have been raised and repeatedly decided in connection with the patentability of roofing granule claims as shown by various patents which have been made of record herein.

In the interest of logic, equity and justice it is believed that the Examiner ought not to persist in the rejection of any of claims 5, 6, 7, etc., of this application on a hypothetical combination of prior art, when the Commissioner of Patents has allowed claims 1, 5, 8 and 9 of the Veazey patent No. 2,215,600 as patentably distinct over all the art prior to it, said Veazey patent being based upon an original filing date of March 7, 1935 and the present application being based upon Jewett Serial No. 700,632 having a filing date of December 1, 1933. The same principle applies, perhaps even more forcefully, in respect to other

claims of the present application such as claims 81
76 and 82, and method claims such as 77 and 78.

In this general connection the Examiner's attention is respectfully directed to the decision of the court of Customs and Patent Appeals in In re Greider et al, 113 F. 2d, 122, at 126 (July 1, 1940) where the absence of any attempt to reconcile seemingly inconsistency was deplored.

Applicant's present invention does not concern mere paper discussion, but it involves an invention which has become an important part of the commercial life of this industry, and it concerns patent protection on said invention. To allow claims to remain outstanding in patents of various other parties, issued on later filed applications, which cover various portions and aspects of the present invention, with no attempt to thus meet and answer the problem of conflict presented, would neither be just nor consistent with sound common sense. While oversights are naturally to be expected in conducting the business of the Patent Offiice, yet it is pertinent to observe that the confusion thus caused is of course not chargeable to the present Applicant, but rather to the Patent Office; and such conflicts should be resolved to the Patent Office: see Chapman vs. Beede, 1924, C. D. 270, at 272.

The Examiner is accordingly asked squarely to meet the issues which have thus been presented in this case, as summarized on pages 4 and 5 of Amendment dated May 29, 1941. *Either the Examiner should definitely take the position that he challenges the validity of claims of various patents here involved (and take appropriate action under paragraph* 2 *or Rule* 95), *or else he should withdraw his rejection of claims of the present earlier inventor, which claims present parallel distinctions over the prior art.* This issue is not met, it is submitted, by the Examiner's equivocal comment (page 1 of Paper No. 36):
77 "The fact that certain claims were allowed in other

applications is no valid excuse for allowance of claims to similar subject matter in this case".

The Commissioner of Patents in person has made it clear, in repeated earlier statements, that he is strongly opposed to Examiners making an attack in pending applications on the inventiveness of subject matter claimed in an issued patent *unless the Examiner can cite a direct anticipation of the subject matter, which negatives novelty.* The Commissioner of Patents personally has stated that all rejections on combinations of art are always mere argumentative rejections, and are not favored where the subject matter of patent claims is involved. The Commissioner of Patents personally has presented the gist of these oral comments in his decision in Zaikowsky vs. Smith, 49 USPQ 203, at 204 (March 6, 1941). In this decision he cited with approval, and as an authority, the decision of the Court of Customs and Patent Appeals in re Englehardt, 40 F. (2d) 760.

Claims 89 *to* 97 — *Veazey patent No.* 2,215,600

Reconsideration by the Examiner of his action dated September 30, 1941, and the entry of claims 89 to 97 for purposes of allowance or appeal, and for purposes of interference with Veazey patent No. 2,215,600 is requested.

The Examiner points out that claims 89 to 92 may be classified with the claims of species D (Office action of May 27, 1940, Paper No. 20). That is, these claims are closely related to Applicant's claims 26 and 34 to 40 inclusive, of which claims 35 and 37 may be especially noted as examples.

The Examiner observes that Applicant has elected species, A, and has not specifically elected species D. This
is true, However, it is also significantly true that
78 the Examiner did not require *division* between
claims of group A and group D, but merely required an election of species under Rule 41. In Amendment dated

July 26, 1940, Applicant specifically requested *"that the requirement of election be withdrawn or referred to the Examiner of Classification"*, pointing out reasons therefor: see pages 11 and 12 of said Amendment: Despite this request the Examiner refused to refer the matter to the Examiner of Classification: see particularly page 2 of Office action dated November 19, 1940 (Paper No. 23). Thus the Examiner did not take the position that species D is divisible from species A.

Hence, the Examiner not having required division between Species A and D despite the urgings of the Applicant to refer the matter to the Classification Examiner, it is submitted that it would be improper for him now to persist in urging that claims 89-92 hereof (species D) should be presented in a divisional application. Obviously claims can be presented and issued in a separate application only if there is a valid line of division. Among the claims, as to which the Examiner did not require division, i. e. refused to refer to the Examiner of Classification, are:

> 35. As a new article of manufacture, comminuted roofing granules having a color coating thereon of a weather resistant coating comprising the reaction product of an insoluble fluoride and alkali metal silicate and a coloring agent.
>
> 37. Roofing granules as described, containing the reaction products of a basic flux, *sodium silico-fluoride* and a fusible silica-bearing material capable of reacting with said basic flux and said fluoride to produce an insoluble ceramic material, such granules being substantially free from tendency to effloresce, due to changes in the moisture content of the ambient atmosphere.

79 Among the claims copied from said Veazey patent No. 2,215,600 which the Examiner by his action of September 30, 1941, is suggesting should be put in a separate application are claims 90 and 91 hereof (claims 5 and 8 respectively of said Veazey patent) which read:

> 90. The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.
>
> 91. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

Under these circumstances it is submitted that it is improper for the Examiner to refuse to enter Applicant's amendment and to set up the requested interference with said Veazey patent. In support of this position, attention is directed, for example, to the Commissioner's Decision in Ex parte Fischer, 1933 C. D. 10, 19 USPQ 223, where the Commissioner stated:

> "Where, as here, a patent has been issued to another party and an applicant believes an interference should have been declared and in good faith copies a claim or claims from the patent, makes a complete statement as to how he considers his disclosure supports the copied claim and requests an interference, the claim or claims should be entered and considered notwithstanding the

application is under final rejection as to other claims."

The doctrine of this case has never been over-ruled and still stands, on the basis of an up-to-date check. The only case in which the limitations on the doctrine of this decision were discussed is a case in which the Commissioner denied a petition for the entry of claims *for the reason that the claims were already pending in another application*
(the applicant having thus recognized their divisible
80 character), and the Commissioner accordingly held that the considerations raised in that petition were therefore *moot*: Ex parte Shohan, 48 USPQ 326, at 329 (last half of column 1). This the Shohan decision involved what the Commissioner held was a *moot* question. Furthermore, it should very significantly be noted that *the Shohan decision does not hold or even infer that claims copied from a patent for purposes of interference should be presented in a second application unless there is a clear line of division;* and, as pointed out in "Interference Law and Practice" by Rivise & Caesar, (1940 Edition), page 78, it is customary under the present practice to enter claims for purposes of interference even though the applican't application is under final rejection, when "his application already contains claims to the conflicting subject matter". By referring to the various claims of species D, and by referring to such specific claims as 26, 34-40, and 76, 77 and 78, it will be seen that this application already contained claims directed to such subject matter.

Claims 93 to 97 are classifiable along with such claims as claims 1 and 35, which the Examiner has held (Paper No. 20) to be retainable with species A. Hence these claims merit entry at this time it is submitted. They place this application in better form for appeal since they define subject matter embraced by claims 1, 35, etc., in form and scope closely similar to that which has been approved by the Commissioner of Patents in the allowance of claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600.

The Examiner is therefore kindly requested, in view of the above discussion, now to enter Applicant's amendment containing claims 89 to 97 and to set up an interference with said Veazey patent No. 2,215,600. For the reasons above stated, it appears imperative for these claims
81 to be entered and considered in this application.

The last full sentence of the first full paragraph on page 2 of Office action of September 30, 1941 seems to be the result of a mistaken impression by the Examiner. The Examiner takes the position, seemingly, that sodium silico-fluoride was not specifically disclosed as a coating ingredient to be employed with sodium silicate or the like. This mistake will be overcome by reference to pages 20 and 21, and other portions, of the present specification; also by reference to the provisions of various claims hereof, as above referred to, such as claims 26 and 34 to 40; and also by reference to Office action of May 27, 1940, page 1, where the Examiner stated:

> "D. Claims 37 and 39 for a reaction product of a 'basic flux', *sodium silico-fluoride* and 'fusible silica bearing material'; these claims read only on *Ex.* 6 *as modified by the last paragraph on page* 20, wherein the 'basic flux' is sodium silicate and the fusible siliceous material is kaolin." (emphasis added).

Kindly enter this amendment, and also Amendment of September 16, 1941, for purposes of allowance or to place this application in better condition for appeal. Favorable reconsideration and allowance of the claims and/or declaration of the requested interferences are also earnestly solicited.

Death of the prior attorney of record and circumstances surrounding the same, together with the aforesaid decision of the Board of Appeals dated October 20, 1941, explain the presentation of this amendment and argument at this time.

Respectfully submitted,

CLIFFORD L. JEWETT

HAROLD J. KINNEY
By HAROLD J. KINNEY, Associate Attorney
December 20, 1941
HJK:W/D

82 Mailed Jan 5 1942

DEPARTMENT OF COMMERCE
United States Patent Office
Washington

Please find below a communication from the EXAMINER in charge of the application.

CONWAY P. COE
Commissioner of Patents,

Applicant: Clifford L. Jewett
Ser. No. 233,293
Filed Oct. 4, 1938
For Colored Granulated Material

Harold J. Kinney
900 Fauquier Ave.
St. Paul, Minnesota

The proposed amendment of December 23, 1941 has not been entered as it does not place this case in condition for allowance. No further amendments or claims will be considered unless they are clearly enterable. The cancellation of claims 83 to 88 and those enumerated on page 1, lines 9 to 11 of the last amendment have not been made since these cancellations have not been authorized irrespective of the entry of the rest of the amendments. If applicant wishes to cancel these claims it will be done upon further authorization.

The statutory period for response runs six months from July 11, 1941.

C. F. KRAFFT
Examiner

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83 Supervisory Examiners U. S. Patent Office
Jan 12 1942

IN THE UNITED STATES PATENT OFFICE
COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938
(As a Continuation-in-part of
S. N. 700,632, filed December 1, 1933)

PETITION TO THE COMMISSIONER

Honorable Commissioner of Patents

Washington, D. C.

Sirs:

This is a petition to the Commissioner from the actions of the Primary Examiner of Division 38 dated September

30, 1941, and January 5, 1942. This petition mainly concerns:

(1) The refusal of the Primary Examiner to enter claims 89, 90, 91 and 92 (which are verbatim the same as claims 1, 5, 8 and 9, respectively, of Veazey patent No. 2,215,600, filed March 7, 1935, issued Septemer 24, 1940);

(2) The refusal of the Examiner to enter Applicant's Amendments of September 16, 1941, and December 23, 1941, respectively;

(3) The action of the Examiner in action dated July 11, 1941, of urging *argumentative* grounds of rejection which are clearly, even admittedly, repugnant to the validity of claims of issued patents.

The present application is directed particularly to colored, ceramically coated roofing granules. The prosecution of this application has been rendered complex for reasons entirely beyond the Applicant's control. Not only one, but several patents have been isued, based upon later original filing dates, containing claims which exactly define and/or approximately define the subject matter to which the present application is particularly directed. Attention is directed to claims of various patents in
84 their relation to claims of the present application, as summarized on pages 4 and 5 of Applicant's Amendment dated May 29, 1941. This involves Nichols patent No. 2,061,246, claim 10 and others; Hillers patent No. 2,070,359, claims 13 and 18 and others; Hillers patent No. 2,094,452, claims 5, 10, 13 and others; Ward patent No. 2,114,692, particularly claims 1 and 2 and Hillers patent No. 2,177,389, which only contains a single claim. Attention is of course also directed to Veazey patent No. 2,215,600 above

mentioned, which is discussed on pages 3 et seq. of Applicant's Amendment dated September 13, 1941.

From the above it will be seen that subject matter as herein described, and various aspects thereof, have been held not only once but repeatedly by the Patent Office to involve patentable invention.

Claims 89 to 92 Presented for Interference With Veazey patent No. 2,215,600

Claims 89 to 92, and closely related claims 93 to 97 were presented in Amendment of September 16, 1941. Claims 89, 90, 91 and 92, as above stated are verbatim copies of claims 1, 5, 8 and 9 of said Veazey patent. The Examiner pointes out in Office action of September 30, 1941 that said claims 89 to 92 are classified with the claims of species D (Office action of May 27, 1940, Paper No. 20). That is, these claims are closely related to Applicant's claims 26 and 34 to 40 inclusive, of which claims 35 and 37 may be expressly noted as examples. In other words, these claims involve sodium fluosilicate as an ingredient of the granule coating composition, along with other coating ingredients, especially an alkali metal silicate such as sodium silicate. This much is recognized clearly by the Examiner: see the last half of page 1 of the Office action of September 30, 1941.

The Examiner's basis for refusing to enter these
85 claims (for action on the merits and the declaration
of an interference) is that these claims are directed to a non-elected species. The Examiner observes that Applicant has elected species A and has not specifically elected species D. This much is true, but it is also true that an election of species under Rule 41 is quite a different thing from a requirement of division under Rule 42. It is significant to note that the Examiner did not require *division* between the claims of group A and the claims of group D, but merely required an *election of species* under Rule 41.

In Amendment dated July 26, 1940, Applicant specifically requested "that the requirement of election be withdrawn or referred to the Examiner of Classification", pointing out reasons therefor: see pages 11 and 12 of said amendment. Despite this request the Examiner refused to refer the matter to the Examiner of Classification; see particularly page 2 of Office action dated November 19, 1940 (Paper No. 23). Thus the Examiner did not take the position that species D is divisible from species A.

Hence, the Examiner not having required division between Species A and D despite the urgings of the Applicant to refer the matter to the Classification Examiner, it is submitted that it would be improper for him now to persist in urging that claims 89 - 92 hereof (species D) should be presented in a divisional application. Obviously claims can be presented in and issued on a separate application only if there is a valid line of division. Among the claims, as to which the Examiner did not require division, i. e. refused to refer to the Examiner of Classification, are:

> 35. As a new article of manufacture, comminuted roofing granules having a color coating thereon of a weather resistant coating comprising the reaction product of an insoluble fluoride and alkali metal silicate and a coloring agent.

> 86 37. Roofing granules as described, containing the reaction products of a basic flux, *sodium silico-fluoride* and a fusible silica-bearing material capable of reacting with said basic flux and said fluoride to produce an insoluble ceramic material, such granules being substantially free from tendency to effloresce, due to changes in the moisture content of the ambient atmosphere.

Among the claims copied from said Veazey patent No.

2,215,600 which the Examiner by his action of September 30, 1941, is suggesting should be put in a separate application are claims 90 and 91 hereof (claims 5 and 8 respectively of said Veazey patent) which read:

> 90. The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.
>
> 91. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction produce of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

Under these circumstances it is submitted that it is improper for the Examiner to refuse to enter Applicant's amendment and to set up the requested interference with said Veazey patent. In support of this position, attention is directed, for example, to the Commissioner's Decision in Ex parte Fischer, 1933 C. D. 10, 19 USPQ 223, where the Commissioner stated:

> "Where, as here, a patent has been issued to another party and an applicant believes an interference should have been declared and in good faith copies a claim or claims from the patent, makes a complete statement as to how he considers his disclosure supports the copied claim and requests an interference, the claim or claims should be entered and considered

> notwithstanding the application is under final rejection as to other claims.''

The doctrine of this case has never been overruled and still stands, on the basis of an up-to-date check. The only case in which the limitations on the doctrine of this decision were discussed in a case in which the Commissioner denied a petition for the entry of claims *for the* 87 *reason that the claims were already pending in another application* (the applicant having thus recognized their divisible character), and the Commissioner accordingly held that the consideration raised in that petition were therefore *moot*: Ex parte Shohan, 48 USPQ 326, at 329 (last half of column 1). Thus the Shohan decision involved what the Commissioner held was a *moot* question. Furthermore, it should very significantly be noted that *the Shohan decision does not hold or even infer that claims copied from a patent for purposes of interference should be presented in a second application unless there is a clear line of division;* and, as pointed out in ''Interference Law and Practice'' by Rivise & Caesar, (1940 Edition), page 78, it is customary under the present practice to enter claims for purposes of interference even though the applicant's application is under final rejection, when 'his application already contains claims to the conflicting subject matter''. By referring to the various claims of species D, and by referring to such specific claims as 26, 34-40, and 76, 77 and 78, it will be seen that this application already contained claims directed to such subject matter.

Claims 93 to 97 are classifiable along with such claims as claims 1 and 35, which the Examiner has held (Paper No. 20) to be retainable with species A. Hence these claims merit entry at this time it is submitted. They place this application in better form for appeal since they define subject matter embraced by claims 1, 35, etc., in form and scope closely similar to that which has been approved by the Commissioner of Patents in the allowance of claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600.

For the reasons stated it is submitted that claims
88 89 to 92, as well as the closely related claims 93 to
97 (presented in the same amendment) and claims
98 to 102 (presented in Amendment of December 23, 1941) should be entered and considered on the merits in this application.

The last full sentence of the first full paragraph on page 2 of Office action of September 30, 1941 can be the result only of a mistaken impression by the Examiner, particularly inasmuch as it is in conflict with the expressly recognized disclosure of this application, made in an earlier Office action. The Examiner took the position in said action of September 30, 1941, seemingly, that sodium silico-fluoride was not disclosed in the present application for use in place of sodium alumino-fluoride (i. e. cryolite), for example in Formula 3 on page 10, or in Formula 6 on page 11 of the specification. This mistake of fact has not been repeated in the Office action of January 5, 1942; however, neither have the erroneous statements in the previous Office action been expressly withdrawn therein. That such position of the Examiner was the result of a mistake of fact will be clear by reference to pages 20 and 21, and other portions of the present specification; also by reference to the prosecution of the various claims hereof, as above referred to, such as claims 26 and 34 to 40; and also by reference to Office action of May 27, 1940, page 1, where the Examiner stated:

> "D. Claims 37 and 39 for a reaction product of a 'basic flux', *sodium silico-fluoride* and 'fusible silica bearing material'; these claims read only

> on *Ex.* 6 *as modified by the last paragraph on page* 20, wherein the 'basic flux' is sodium silicate and the fusible siliceous material is kaolin." (emphasis added).

89 An important feature of practice is here involved, namely: Does the Commissioner's decision in Ex parte Fischer, 1933 C. D. 10 and the statement of procedure as pointed out in "Interference Law and Practice" by Rivise & Caesar (1940 Edition) page 78, describe sound practice, or is a new procedure to be instituted whereby claims which are copied for purposes of interference from an issued patent should be filed in a separate application even where no line of division has been held by the Patent Office to exist and where the applicant himself has not indicated that a line of division exists, as did the applicant in Ex parte Shohan, supra? It is believed that the Commissioner would not favor institution of such novel procedure and it is furthermore believed that if such procedure were instituted it would warrant correction by the courts much in the same manner that old Rule 41 of the Rules of Practice was held to be invalid.

The Refusal of the Examiner to Enter Applicant's Amendments of September 16, 1941 and December 23, 1941

Amendment of September 16, 1941 contained claims 89 to 97. As before stated, claims 89 to 92 are verbatim the same as claims 1, 5, 8 and 9 respectively of the aforesaid Veazey patent No. 2,215,600. Claims 93, 94, 95 and 96 are parallel to claims 89, 90, 91 and 92 respectively, but are drawn so as to cover cryolite, i. e. sodium fluoaluminate, as well as the sodium fluosilicate, as specified in the claims copied from Veazey. As above pointed out, and as will be apparent from pages 20, 21 and other portions of the present specification, cryolite and sodium fluosilicate were recognized as being interchangeable to a substantial extent in Applicant's coating composition.

Claim 97 is dependent on claim 96 and is generally comparable to original claim 21, that is, it is directed to a roofing sheet material surfaced with the coated roofing granules of claim 96.

90 The Examiner's ground for refusing to enter claims 89 to 92, as above discussed, is that these claims are directed to a non-elected species, namely species D which includes the fluosilicate reactant. This, it is urged, is not a valid ground for refusing entry of these claims.

The Examiner's ground for refusing entry of claims 93 to 97 is that these claims are broader than those copied from the Veazey patent. The Examiner does not question or deny the proposition that these claims are related to and are directed to generally the same subject matter as claims 26 and 34 to 40 inclusive and 78; neither does he deny that, in certain respects, these claims are even less broad than certain claims in the group just mentioned. Also, insofar as recited ingredients are concerned, claims 93 to 97 are generally within the scope of original claim 1 of the present application.

The Examiner also states that claims 93 to 97 are refused entry since the prosecution of this case is closed. However, it is no new proposition in Patent Office practice for amendments to be accepted after a final action, and it will be observed that the Examiner does not take the position that the entry of claims 93 to 97 would not result in the allowance of these claims; nor does he take the position that their entry would not place the application in better condition for appeal. It is believed that the entry of these claims should properly lead to their allowance forthwith, since the present Applicant on the basis of his original disclosure in S. N. 700,632, filed December 1, 1933, which supports each and all of said claims, is senior to Veazey on the record by more than fifteen months.

In respect to Applicant's Amendment of December 23, 1941, the Examiner refuses entry of this amendment solely on the basis that "it does not place this case in condition for allowance". The Examiner does not question or gainsay the proposition that this amendment would
91 place various of the claims in condition for allowance and would unquestionably place the application as a whole in better condition for appeal. One of the reasons for Applicant's amendment of December 23, 1941 was a decision of the Board of Appeals dated October 20, 1941, rendered in an application which also involved roofing granules. In that decision, based upon the wording thereof, the Board apparently drew a significant distinction between claims which specified *fused* coatings and claims which specified *unfused* coatings. The pertinency of the amendments in claims 3, 4 and others in Amendment of December 23, 1941 will be observed in this connection. Certain of the amendments in addition to limiting granule coatings to those of the unfused type, also have further provisions which still more clearly specify that the coating is effected at a temperature very substantially above atmospheric temperatures, e. g. "above the dehydration point of the sodium silicate" or the like: note the amendments in claims 3, 6 and others in this respect.

The reason for new claims 99 to 102 will be quickly apparent. The need for these claims, in just this form, became evident upon the failure of the Examiner promptly to set up the requested interference with Veazey. Claims 99, 100, 101 and 102 parallel claims 89, 90, 91 and 92 (i. e. claims 1, 5, 8 and 9 of the Veazey patent) *except* these new claims recite sodium alumino-fluoride, i. e. cryolite instead of sodium silico-fluoride.

New claim 98 was presented to still more specifically cover the subject matter of Formula 6, page 11 of the specification.

92 For the reasons stated Applicant's Amendments of September 16, 1941 and December 23, 1941 are believed clearly to merit entry. It will be noted that the cancellation of claims 83 to 88 is directed in the Amendment of September 16, 1941, and the cancellation of a number of claims was directed on page 1 of the Amendment of December 23, 1941.

It is submitted that this case is not in proper condition for appeal until these amendments are entered and considered, said amendments having been presented for the reasons above stated, and involve bringing various claims, as necessary, better into line with the reasoning of the Board of Appeals in their recent decision above mentioned. As stated in Wolcott's "Manual of Patent Office Procedure" (1940, page 85: "It is not of infrequent occurrence that an amendment is filed along with an appeal." The Rules of Practice of the Patent Office, particularly Rule 68, makes a provision for the filing of amendments even "after appeal has been taken". It will be noted that the amendments in question were filed long in advance of the taking of any appeal, and no appeal has been taken up to the present writing.

The Examiner's action dated July 11, 1941, in urging *argumentative* grounds of rejection which are clearly, even admittedly repugnant to the validity of claims of issued patents, is unwarranted under the Rules of Practice and decisions governing practice.

In Office action dated July 11, 1941, which is termed a final action, the Examiner rejected a large group of claims on the argumentative ground that they they are "unpatentable over Todd in view of Walton, Nicholson or Gundlach".

This is a rejection on an argumentative combination of art.
It had previously been pointed out to the Examiner that
this argumentative rejection in addition to being unsound,
was moreover clearly repugnant to the validity of claims
of not only one but several patents which issued on
93 applications having later filing dates than the orig-
inal filing date of the present subject matter, namely
much later than December 1, 1933. The Examiner's re-
sponse to this on page 1 of Office action of July 11, 1941 is
his statement: "The fact that certain claims were allowed
in other applications is no valid excuse for allowance of
claims to similar subject matter in this case. As a matter
of fact the Todd patent was not cited during the prosecu-
tion of the other applications."

Now it is obvious that such an argumentative ground of rejection is in no way controlling on the validity of such issued patents, but of course it does contitute a collateral attack by the Examiner on the validity of claims issued by the Commissioner himself. This action is understood to be improper *as a matter of procedure* under paragraph 2 of Rule 95 of the Rules of Practice. Also the Commissioner of Patents in person, as recently as the summer of 1941, was understood by the undersigned attorney to state that he uniformly opposes a holding of lack of patentable invention in subject matter which is specifically novel and which is disclosed and claimed in an issued patent. The Commissioner was also understood to state that rejections on a proposed combination of two or more patents or publications is always nothing more than an argumentative rejection. These oral views of the Commissioner in person are covered in a general way in his decision in Zaikowsky vs. Smith, 49 USPQ 203, at 204 where he states, inter alia:

> "In the first place it is to be noted that, where it is alleged that a patent claim is unpatentable over references which would anticipate the patentee as well as

> the applicants, a clearer showing than that required in the case of claims which do not appear in a patent is necessary. (Both v. Barr, 200 O. G. 582, 1914 C. D. 29. In re Engelhardt, 400 O. G. 678, 40 F. 2d 760, 1930 C. D. 541)."

94 It is respectfully submitted that practice before the Patent Office stands in grave danger of being thrown into serious disrepute if the Primary Examiners ignore the principles above quoted and proceed, without restraint, to attack and undermine the validity of various issued patents, purely on argumentative grounds of rejection. If the Examiner had found art which he believed to directly negative novelty, that is, if he found a single patent, or other single publication, which made a direct and full disclosure of the subject matter in question, obviously the Office would not be expected to perpetuate an error. But when his argument is simply a matter of theory about whether the invention of the present Applicant would or would not be obvious in view of a plurality of prior patents, and whether or not it would or would not be obvious to piece together the disclosures of those patents in a way to make out the Applicant's invention, it is submitted that these actions of Examiners should be condemned as a matter of procedure, as being inconsistent with the dignity of the Commissioner's act in issuing various patents in question, namely Veazey patent No. 2,215,600, Hillers patent No. 2,070,359, claims 13 and 18 and other patents hereinabove mentioned.

Note that in said action of July 11, 1941 Applicant's claim 81 is among the claims which have been rejected on a combination of art. It will be obvious that this claim is supported by Applicant's parent application S. N. 700,632, filed December 1, 1933: see the formula therein which expressly recites cryolite, sodium silicate and a pigment as

coating ingredients for the granules. It will also be very
clear that if claim 81 of the present application could be
rejected on a combination of "Todd in view of Walton,
Nicholson or Gundlach", as the Examiner contends for
the sake of argument, then claim 13 of Hillers patent No.
2,070,359 would be obviously invalid. The Gund-
95 lach patent in question is expressly directed to
fused coatings and hence is accordingly no less pertinent
against said claim of Hillers and is probably more
pertinent in respect thereto than it is to claim 81 of the
present application. However the Examiner, even by virtue
of his combination of art, clearly recognizes that
Gundlach does not itself anticipate either the claims of
Hillers or the claims of the present application.

WHEREFORE APPLICANT RESPECTFULLY PRAYS

(1) That the Primary Examiner be directed to enter claims 89, 90, 91 and 92;

(2) That the Primary Examiner be directed to consider claims 89, 90, 91 and 92 on the merits and/or to declare an interference between them and claims 1, 5, 8 and 9 respectively of Veazey patent No. 2,215,600;

(3) That the Primary Examiner be directed to enter Applicant's Amendment of September 16, 1941 (or, in the alternative, that he be directed to enter it in part, in the event that the Commissioner should observe any reason why any one or more claims of said amendment should not be entered);

(4) That the Primary Examiner be directed to enter Applicant's Amendment of December 23, 1941.

(5) That the Primary Examiner be directed to enter that portion of Amendment of December 23, 1941 which involves the amendment of previously existing claims and the cancellation of certain previously existing claims, in the event that for any reason the Commissioner should hold the amendment as a whole may not be entered;

96 (6) That the Primary Examiner be directed to withdraw mere argumentative rejection, based solely upon proposed combinations of patents from different arts, which are repugnant to the validity of claims of issued patents here of record (see page 1 of action of July 11, 1941, for example); and

(7) That such other and further relief be granted as the Commissioner, upon a full consideration of this case, may deem proper.

Respectfully submitted,
CLIFFORD L. JEWETT
By Harold J. Kinney,
Associate Attorney

January 9, 1942
HJK:D
97 BOARD OF APPEALS

Jan 13 1942
U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE

COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT

Serial No. 233,293
Filed: October 4, 1938
(As a continuation-in-part of
S. N. 700,632, filed December 1, 1933)

NOTICE OF APPEAL TO THE BOARD OF APPEALS

Honorable Commissioner of Patents
Washington, D. C.

Sir:

Appeal is hereby taken to the Board of Appeals from the final rejection of the Primary Examiner dated July 11, 1941.

Subsequent to the final rejection an amendment was presented copying claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600 as claims 89, 90, 91 and 92 respectively, herein, and an interference with said Veazey patent was requested. The Examiner refused to enter such claims or to declare such interference, pointing out that the claims were similar to the claims of species D, outlined by the Examiner under Rule 41 of the Rules of Practice, although no requirement for division between species D and the elected species A has ever been made. The Applicant also presented amendments to several of the claims and directed certain claims to be cancelled since said final rejection and the Examiner thus far has refused to enter such amendments.

A Petition to the Commissioner has been filed on the above and other points and therefore this case is not in condition for the preparation or forwarding of an Examiner's Statement under Rule 135. It is believed that the application should properly be placed in interference rather than being forwarded to the Board on appeal.

However, this appeal is being noted to avoid any possibility of a technical abandonment.

98 The following are assigned as errors and as reasons for appeal:

(1) The Examiner erred in rejecting or failing to allow the claims in this application.

(2) The Examiner erred in rejecting various of Applicant's claims as unpatentable over the Todd et al patent of record in view of the Walton, Nicholson or Gundlach patents of record, as stated on page 1 of the Office action of July 11, 1941.

(3) The Examiner erred in rejecting certain of Applicant's claims as involving no invention over the Gundlach, Nicholson, Tilton, Muirhead, Boggs or Hillers patents in view of the aforesaid Todd et al patent, as stated at the top of page 2 of said final action of July 11, 1941.

(4) The Examiner erred in rejecting claims 41 to 46, 49 to 59 and 70 to 75 as unpatentable to Applicant over Hillers patent No. 2,070,359 in view of the decision of the Board of Appeals in Interference No. 77,289, Paper No. 38, when the Hillers patent has a later original filing date than the present Applicant and when no decision on priority was rendered in the interference aforesaid.

(5) The Examiner erred in rejecting various of the claims of this application on the grounds set forth in Office action of May 27, 1940.

(6) The Examiner erred in refusing to declare the requested interferences.

(7) The Examiner erred in rejecting claims on an argumentative combination of prior art which is repugnant to the patentability of claims of various patents issued on later filed applications.

99 (8) The Examiner erred in rejecting claims on a combination of patents on the ground that: The fact that certain claims were allowed in other applications is no valid excuse for allowance of claims to similar subject matter in this case.

(9) The Examiner erred as to questions of law.

(10) The Examiner erred as to questions of fact.

(11) The Examiner erred in not allowing the claims, notwithstanding each and every matter or thing of objection urged by him there against.

An oral hearing is requested.

Counsel's check in the amount of $15.00 is enclosed herewith to cover the appeal fee.

Respectfully submitted,
CLIFFORD L. JEWETT

By HAROLD J. KINNEY
Harold J. Kinney, Associate Attorney

January 10, 1942
HJK:D

NOTE: Upon decision by the Commissioner of the pending Petition it may be desirable then to supplement this Notice of Appeal.

HAROLD J. KINNEY

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DEPARTMENT OF COMMERCE
United States Patent Office
Washington

February 23, 1942.

PETITION.

Application of
Clifford L. Jewett,
Ser. No. 233,293,
Filed October 4, 1938,
Colored Granulated Material.

This is a petition that (1) certain rejections be withdrawn because argumentative and in derogation of claims patented to others; and (2) that certain amendments filed after final rejection be entered.

The record shows that certain claims, not verbatim copies of a patent or of such substance that they would qualify for interference under any of the well-known decisions as being for substantially the same invention, were rejected on a combination of references. Applicant argues that the rejection casts a cloud on the validity of the patent. This is not a situation where applicant can complain of the rejection for the ground stated. It is rather one where applicant is arguing the merits of a claim under the guise of a petition, and therefore comes under the condemnation of Ex parte Strimban, 1912 C. D. 195. On this point the petition is dismissed.

Applicant's amendment of Sept. 16, 1941, presents among others, claims 89 to 92 which are said to be verbatim copies of claims of a patent. Applicant's argument appears to amount to the contention that under Ex parte Fischer, 1933 C. D. 10 he has an absolute right to have such claims entered, merely because they are copied from a patent; and that his right to prosecute such claims does not terminate with a refusal of the primary examiner to enter them for reason (such as lack of patentability to applicant in this application) when they are presented after prosecution of the case has been closed by final rejection, but he has the right to have them entered for appeal to the Board and courts.

101 Carried to its logical conclusion applicant's contention is that even though the prosecution of an application has been closed by final rejection, an applicant can force reopening of the prosecution by the simple expedient of offering claims copied from a patent. Carrying this proposal still further, an applicant could resort to the same expedient to reopen the prosecution of any application after final decision had been rendered by a court, and there would be no way of terminating the prosecution of such application so long as the applicant wished to keep it from issuing as a patent. The fallacy of this reasoning is obvious.

Applicant argues that Ex parte Fischer has never been squarely overruled. However that may be, Ex parte Shohan, 522 O. G. 501, clearly indicated that

> "insofar as that decision could be invoked to confer a definite right to have claims entered for determination of an applicant's rights thereto independent of the tests above referred to, mainly because the claims are

> copied, or substantially copied, from a patent, such construction of the Fischer decision cannot be followed, and moreover is not in harmony with certain other decisions hereinafter cited."

The right contended for can not be conceded. Moreover it does not appear that the examiner abused the discretion vested in him in refusing entry of the amendment of September 16, 1941.

The amendment of December 23, 1941, is of such scope and extent that if entered it would require a reopening of the prosecution. It is not of such character that it could be entered for purpose of appeal. No verified showing has been made of why it was not earlier presented, and no reason is seen why its entry is necessary or desirable after the extensive consideration so far given this case.

The petition is dismissed as the the first ground and is denied as to the second.

V. J. RICHARD
Supervisory Examiner.

Mr. Harold J. Kinney,
900 Fauquier Ave.,
St. Paul, Minn.

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102 Supervisory Examiners U. S. Patent Office
Mar 27 1942

IN THE UNITED STATES PATENT OFFICE

COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293

Filed: October 4, 1938
(As a Continuation-in-part of
S. N. 700,632, filed December 1, 1933)

PETITION TO THE COMMISSIONER
REQUEST FOR RECONSIDERATION

Honorable Commissioner of Patents
Washington, D. C.

Sir:

Applicant filed a Petition to the Commissioner dated January 9, 1942, presenting seven specific prayers for relief. This Petition was answered by the Supervisory Examiner in Decision dated February 23, 1942; however, the Supervisory Examiner did not make specific rulings on Petitioner's several prayers for relief.

A very important question of practice is here presented, and it involves the question of whether claims which are copied for purposes of interference from an issued patent should be presented in a new application, separate from the present application, *even where no line of division has been held by the Patent Office to exist and where the Applicant himself has not indicated that a line of division exists* (as distinguished from the applicant Shohan: see Ex parte Shohan, 48 USPQ, 326, at 329).

The circumstances here presented are fully and yet concisely pointed out in Applicant's aforementioned Petition, dated January 9, 1942. Accordingly, the substance of that Petition will not be here reviewed, and it is requested that the Commissioner carefully consider the entire content of that Petition preliminary to consideration of this Request for Reconsideration.

103 The most important procedural point, as above indicated, involves the right of Applicant, *under the*

circumstances of this case, to have claims 89, 90, 91 and 92 (which are verbatim the same as claims 1, 5, 8 and 9, respectively, of Veazey patent No. 2,215,600) entered for purposes of allowance or appeal or the declaration of an interference.

The Supervisory Examiner (top of page 2 of his Decision) asserts:

> "Carried to its logical conclusion applicant's contention is that even though the prosecution of an application has been closed by final rejection, an applicant can force reopening of the prosecution by the simple expedient of offering claims copied from a patent".

First of all, the Applicant does not insist that time in which appeal may be taken, should be extended or reset. Applicant simply requests that the claims copied from the patent be entered for purposes of allowance or interference or appeal. One of the commonest things in the practice of the Patent Office is to enter claims after final rejection either for purposes of allowance or interference or appeal; and this is very commonly done without reopening the prosecution of the application in the sense of staying the running of the time for taking an appeal.

In the second sentence on page 2 of his Decision the Supervisory Examiner states:

> "Carrying this proposal still further, an applicant could resort to the same expedient to reopen the prosecution of any application after final decision had been rendered by a court, and there would be no way of terminating the prosecution of such application so long as the applicant wished to keep it from issuing as a patent. The fallacy of this reasoning is obvious."

It will be obvious that it is the Supervisory Examiner
and not the Applicant or his attorney who is "carrying this
proposal still further". It will also be obvious that when
the Supervisory Examiner states that the "fallacy of this
reasoning is obvious", it is his own hypothetical reasoning
to which he refers and not the reasoning of Appli-
104 cant or his attorney and it has no cogent relation to
the relief asked for by the Applicants.

Without a doubt, the Commissioner reserves the right to consider each case on its merits and the granting of the relief asked for in this application obviously need not throw open the door to any such hypothetical situations as are suggested by the Supervisory Examiner at the top of page 2 of his Decision.

Additionally, the entire first paragraph on page 2 of the Supervisory Examiner's Decision appears to presuppose or presume an endless or uninterrupted series of oversights and errors by the examining corps of the Patent Office. This paragraph seems to presume that the Primary Examiners of the Patent Office, as a more or less usual matter, as contradistinguished from special cases, are going to issue patents containing claims which conflict with and overlap the subject matter described in other pending applications, such as the present application. This is an unflattering inference in respect to the examining corps of the Patent Office and furthermore is considered to be an unsound viewpoint, as a general matter. It is believed that the Commissioner will agree that the more correct assumption is the Primary Examiners and acting Primary Examiners in the great majority of the cases will not issue patents containing claims which overlap and conflict with the disclosure of other applications. When oversights or errors do occur in this respect, they are obviously the errors or oversights of the personnel of the Patent Office and not of the Applicants.

As yet no requirement of division has been made between the claims of Species D (i. e. claims 26, 34 - 40, 76, 77 and 78), with which claims 89, 90, 91 and 92, copied from the Veazey patent, are classified) and the elected Species A.

The very fact that the Examiner required election
105 under Rule 41, as distinguished from division under
Rule 42, is indicative of the fact that he considered
that the claims of Species D might appropriately issue
along with Species A in the event of allowance of generic
claims.

It seems incongruous and repugnant to orderly practice that the present applicant could be expected to present claims 89, 90, 91 and 92 (copied from the Veazey patent) in a divisional application when the subject matter has not been held to be divisible, even though the Examiner had occasion to rule on claims directed to the same species, viz. claims 26, 34 - 40, 76, 77 and 78. In fact, Applicant requested that the matter be referred to the Examiner of Classification, and this request was refused.

A ruling on each of the seven prayers for relief set out in Applicant's previous Petition, dated January 9, 1942, is requested. It is also requested that the Commissioner rule either that:

(8) Claims 89, 90, 91 and 92 (i. e. claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600) are, or else that they are not, directed to subject matter divisible from various of the claims retained in this application, including the claims of Species A and Species D, of which latter group claim 78 is an example.

At the end of paragraph 2, page 1, of his Decision, the Supervisory Examiner refers to the Commissioner's Decision in Ex parte Strimban, 1912 C. D. 195. It appears obvious that insofar as this decision might be held to be in conflict with the subsequent decision of the Court of Customs and Patent Appeals in re Engelhardt, 40 F. 2d 760, 1930 C. D. 451, or the Commissioner's Decision in Zaikowsky vs. Smith, 49 USPQ 203, at 204, such decision is superseded

by the subsequent decision of the Court of Customs and Patent Appeals and the subsequent decision of the Com-
missioner based upon said Court decision: see page
106 11 of Applicant's Petition herein dated January 9,
1942.

In conclusion, it is urged that the present Applicant, under the circumstances of the present case, cannot be expected haphazardly and illogically to split up claims defining the subject matter of the present invention by presenting claims 89, 90, 91 and 92 in a further application. It will be noted that claims 89, 90, 91 and 92 were presented by Amendment dated September 13, 1941, namely within about two months after the Examiner's rejection of July 11, 1941, almost four months prior to the time limit therein set for appeal.

It is believed that, if the doctrine of the Commissioner in Ex parte Fischer, 1933, C. D. 10, 19 USPQ 223, were to be set aside as proposed by the Supervisory Examiner, and if the Commissioner's opinion in Ex parte Shohan, 48 USPQ 326, at 329 (last half of column 1), on the admittedly *moot* point there in question, were to be applied to an actual case or controversy such as the present one, and were furthermore to be expanded as suggested by the Supervisory Examiner, such rulings would be in conflict with basic principles of law and practice and would merit correction by higher tribunals.

A favorable ruling on each of the seven prayers for relief set out in Applicant's earlier Petition and the further prayer for relief set out hereinabove are requested. It is also requested that the forwarding of the appeal to the

Board of Appeals be withheld pending final determination of the important question here involved.

Respectfully submitted,
CLIFFORD L. JEWETT
By HAROLD J. KINNEY,
His Attorney

March 21, 1942
HJK:D

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107 DEPARTMENT OF COMMERCE

APR 20 1942

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UNITED STATES PATENT OFFICE
RICHMOND, VIRGINIA

April 20, 1942

REQUEST FOR RECONSIDERATION

Ex parte Clifford L. Jewett,
Serial No. 233,293,
Filed October 4, 1938,
Colored Granulated Material

This is a request for reconsideration of the decision of February 23, 1942 on petition to the Commissioner filed January 12, 1942.

The Examiner refused entry of the amendments referred to in the decision on the grounds that it is not clear the claims sought to be entered are supported by the disclosure and that even if they were otherwise patentable to applicant they could not be allowed him in this application because drawn to a non-elected species. Applicant concedes that these claims are drawn to a non-elected species. Thus the present situation is distinguished from that in *Ex parte* Fischer, 436 O. G. 556, 1933 C. D. 10, in that in the Fischer case it does not appear that if the claims in question were patentable to Fischer he nevertheless could not retain them in the application in which he was seeking to make them. The same may be said with regard to *Ex parte* Priebe, 221 O. G. 351, 1915 C. D. 39.

The final rejection concerns only claims drawn to the elected species, and since the claims now presented relate to a different species, it appears that entry of the amendment would not place the case in better condition for appeal from the final rejection. Obviously, since certain claims would remain under rejection, entry of the amendment would not place the case in condition for allowance.

Applicant repeats that the claims should be entered nevertheless for purpose of interference because they are copied from a patent. The examiner's actions indicate that if the claims were entered he would reject them as being drawn to a non-elected species. If this is true, as appears to be conceded by applicant, and the claims would be subject to such rejection without possibility of the rejection being affected by allowance of a generic claim, it is not seen under what circumstances the claims might be patentable to applicant in this case, and they do not embrace any subject matter which could be patentable
108 to applicant in this case. If the claims are not
drawn to subject matter which is patentable to applicant in this application they do not qualify under Rule 94 as a basis for placing this application in interference.

It is still considered that the Examiner was correct in refusing to enter the amendments. It is noted, however, that the Examiner has indicated his willingness to enter certain parts of the amendment of December 23, 1941 if presented separately from the non-enterable matter.

The request to direct the Examiner to withdraw certain rejections has been reconsidered but such action is not deemed to be warranted.

The seven prayers of the prior petition have been treated above. An eighth praper, new to this petition, asks for a ruling on the question of joinder with respect to unentered claims. This in effect asks for a review of the examiner's expressed opinion that the claims refused entry would be subject to rejection, if entered. This is manifestly a matter which should not be decided on petition. As to this prayer the petition is dismissed.

Reconsideration has been granted. However, the decision of February 23, 1942 is considered to have been correct and is adhered to.

HENRY VAN ANSDALE
Assistant Commissioner

Harold J. Kinney,
900 Fauquier Ave.,
St. Paul, Minn.

Mail Division
May 1 1942
U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE

109 COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT

Serial No. 233,293
Filed: October 4, 1938
(As a Continuation-in-part of S. N. 700,632 filed December 1, 1933)

IN RE APPLICANT'S PETITION TO THE COMMISSIONER

FURTHER REQUEST FOR RECONSIDERATION

Honorable Commissioner of Patents
Washington, D. C.

Sir:

Applicant respectfully requests reconsideration of the Decision of the Assistant Commissioner dated April 20, 1942. The Assistant Commissioner, in said Decision, seems to be under as misapprehension as to the circumstances, and conclusions reached by him are based upon such misapprehensions.

Reference is made particularly to two portions of the Decision of April 20, 1942:

(1) The Assistant Commissioner states: "The final rejection concerns only claims drawn to the elected species", This is inaccurate, as will be clear by referring to the final rejection dated July 11, 1941 (Paper No. 36). It will be clear from said Office action that claims of species "D" (also see Office action of May 27, 1940, Paper No. 20), including claims 37, 39, 40, 78 and others, are rejected in said final rejection on the ground of misjoinder, i. e. on the ground of not being readable on the elected species. This rejection is, of course, in turn predicated on the Examiner's position that no generic claim is allowable. Both of these grounds of rejection are subject to review on apepal to the

Board of Appeals, For these and other reasons it will therefore be clear that the Assistant Commissioner's statement is not in accord with the record when he states: "The final rejection concerns only claims drawn to the elected species."

110 (2) Near the end of page 1 of said Decision of April 20, 1942, the Assistant Commissioner points out that the Examiner has stated that if claims 89 - 92 were entered they would be rejected as being drawn to a non-elected species, and the Assistant Commissioner then reasons that if the claims would be subject to such rejection, it would not be possible for that rejection to be affected by allowance of a generic claim. Upon reconsideration it is believed that the Assistant Commissioner will observe that this conclusion is an obvious non-sequitur.

It is believed that the following discussion may be further helpful in reconsidering Applicant's Petition.

The cancellation of claims 60 and 61 (the only claims listed as group "B" in Office action of May 27, 1940) has been directed in Amendment of December 23, 1941, page 1, lines 9 - 11 thereof; note the first full paragraph on page 2 of the Assistant Commissioner's Decision in this regard. Further the cancellation of claims 14, 29 and 47 (the only claims listed as group "C" in said Office action of May 27, 1940) is also directed in the same amendment (page 1, lines 9 - 11 thereof). It will therefore be clear that the remaining species, i. e. group "A" (the elected species) and group "D" (the species containing claims 34 - 40, 78 and other claims already of record, and also claims 89 - 92 here under discussion), are intended to issue along with the generic claims of this application. *Two species are clearly permitted to issue along with generic claims* (*Rule* 41), particularly where there has been no requirement of division (Rule 42).

Thus the Honorable Assistant Commissioner appears clearly to be under a misunderstanding of the circumstances when, in referring to claims 89, 90, 91 and 92 hereof (i. e. claims 1, 5, 8 and 9 of Veazey patent No. 2,215,600), and after observing that they are not directed to the elected species "A" but rather to the other retained species "D",
he says that: "the claims would be subject to such
111 rejection (i. e. misjoinder) without possibility of
the rejection being affected by the allowance of a
generic claim".

This conclusion is without basis in law or fact, it is earnestly and respectfully submitted.

Since species "D" has not been held to be divisible by the Primary Examiner it appears clear that the only rejection against the claims to this species would be overcome upon the allowance of a generic claim. The claims of this species would presumably then be allowable in this application. Therefore the wording in the Decision, "without possibility of the rejection being affected by the allowance of a generic claim", is not well-founded.

It has just been pointed out that the Primary Examiner has never held that the claims of species "D" are divisible from any other claims in this application. The Commissioner has also refused to hold that these claims define subject matter divisible from other claims in this application: see Prayer 8, page 4 of the Petition dated March 21, 1942, and also page 2, third full paragraph of the Assistant Commissioner's Decision of April 20, 1942. If this question of divisibility is "manifestly a matter which should not be decided on petition", as the Assistant Commissioner states, then this must be true because this is a matter of substance and not merely one of procedure, and hence the claims in question should accordingly be entered so that the Primary Examiner's action in this regard (i. e. as to the matter of substance) will be reviewable by the Board of Appeals. If the matter is not reviewable by the Commissioner, then it must be reviewable by the Board of Appeals; or vice versa. The Primary Examiner may not, under the law, properly be made the tribunal of last resort in the Patent Office on this important question of separateness of inventions, or divisibility.

112 Claims 76, 77, 78, and 34 - 40, as well as others, directed to species "D" are already entered and formally a part of this application and the Examiner has implied that they are not divisible from species "A" and the generic claims, by requiring election, and not requiring division. There is no contention or disagreement on the proposition that claims 89, 90, 91 and 92 are also directed to species "D". Under these circumstances it seems clear that claims 89, 90, 91 and 92 belong in the same application with the other claims of species "D", namely in this application.

The practice which the Examiner here attempts to inaugurate under Rule 41 of the Rules of Practice (in refusing to enter claims 89, 90, 91 and 92 copied from the Veazey patent) is as contrary to basic principles of patent law as the practice invoked under old Rule 41 and held invalid and improper in U. S. x rel Steinmetz vs. Allan, Commissioner of Patents, 192 U. S. 543, 48 L. ed. 555.

An Applicant cannot be compelled to present separate species in separate applications for patents *unless there is a clear line of division between them;* In re Isherwood, 1917 C. D. 226. Thus far, no tribunal of the Patent Office has held that there is a clear line of division and the Primary Examiner, in requiring election under Rule 41 and not division under Rule 42, and in denying the Applicant's request that the matter be referred to the Examiner of Classification, has by implication indicated a lack of divisibility.

Accordingly, Applicant requests reconsideration of his Petition, and of the decision thereon. The arguments herein most particularly concern the first three prayers of Applicant's Petition, set out on page 13 of Petition dated January 9, 1942.

In view of what has been said above, it is believed that it will be readily seen that the position stated by the Assistant Commissioner in respect to Ex parte Fischer 113 and Ex parte Priebe, vis-a-vis the question here involved, is unsound. As a matter of fact in the Ex parte Priebe case the claims were ordered by the Commissioner to be entered for purposes of interference even though the Examiner had definitely taken the position that the subject matter was *divisible* by requiring the Applicant to "file within thirty days a divisible application" employing the claims of the proposed interference. The Ex parte Fisher case has already been discussed in Applicant's preceding paper and hence will not again be discussed herein. To paraphrase the Assistant Commissioner's wording in respect to the Fischer case in his said Decision of April 20, "it does not appear that if the claims in question were patentable to the present Applicant Jewett, he nevertheless could not retain them in the present application, in which he is seeking to make them".

A verified statement of the Applicant is attached hereto, and consideration thereof is also courteously requested.

The right of an oral hearing will be appreciated. Applicant's attorney expects next to be in Washington the week of May 18-22, 1942.

Respectfully submitted,
CLIFFORD L. JEWETT
By HAROLD J. KINNEY,
His Attorney

April 30, 1942
HJK:D

MAY 4 1942

IN THE UNITED STATES PATENT OFFICE

COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938
(As a Continuation-in-part of
S. N. 700,632, filed December 1, 1933)

VERIFIED STATEMENT

STATE OF MINNESOTA
ss.
COUNTY OF RAMSEY

CLIFFORD L. JEWETT, being duly sworn deposes and says: That he is the Applicant in the above identified application and is familiar with the prosecution thereof, and is also familiar with Veazey patent No. 2,215,600, issued September 24, 1940; Deponent further states that, after he first learned of the aforesaid Veazey patent, he conducted further work to compare the species invented by him and claimed in claims 1, 5, 8 and 9 of said Veazey patent with other comparable species, in order to evaluate how compelling and essential it was to contest a formal interference; that following this study it was necessary for the Management of the Minnesota Mining and Manufacturing Company, the assignee of the present application, to consider the matter and reach a decision as to the need, from a commercial point of view as well as from the point of view of conflict of inventions, for contesting such an interference; that due to summer vacations and other matters the required conference was delayed somewhat but it took place on or about September 11, 1941; that at least five people (including Deponent) were present at said conference; that following said conference an amendment was promptly prepared containing claims 89 to 92 which are verbatim the same as claims 1, 5, 8 and 9 respectively of said Veazey patent No. 2,215,600, said amendment bearing date of September 13, 1941 and being accompanied by an Affidavit under Rule 94 in respect to said claims; and further deponent sayeth not.

CLIFFORD L. JEWETT
Clifford L. Jewett

Subscribed and sworn to before
me this 30 day of April, 1942.
HARRIET R. DABLOW
Notary Public
Harriet R. Dablow, Notary Public,
Ramsey County, Minn.
My Commission expires March 18, 1947.

115

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Commissioner's Office
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MAY 27 1942
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DEPARTMENT OF COMMERCE
United States Patent Office
Richmond, Virginia
May 27, 1942.

PETITION FOR RECONSIDERATION

Ex parte Clifford L. Jewett,
Serial No. 233,293,

Filed October 4, 1938,
Colored Granulated Material.

Applicant petitions for reconsideration of the decision of April 20, 1942, asserting that the statement therein "The final rejection concerns only claims drawn to the elected species—" is inaccurate because there are also generic claims and claims to non-elected species under final rejection.

The claims to the non-elected species were rejected solely on the ground of not being readable on the elected species. Should the Board of Appeals allow a generic claim, applicant will have the opportunity of having claims to the non-elected "D" species in the application examined as to patentability. In other words, the final rejection raises the issue of whether or not applicant may prosecute any claims at all to the "D" species in this application and does not raise the issue whether upon allowance by the Board of a generic claim any particular claim or claims to the "D" species is or are patentable to applicant. This question of whether or not the "D" species claims may be retained depends solely on the disposition the Board makes of the generic claims, so it might have been stated in the decision that the final rejection concerns only generic claims and claims drawn to the elected species, with the right of applicant to prosecute claims drawn to a non-elected species in this application depending upon the decision as to patentability of a generic claim herein.

Since the Examiner has finally refused applicant the right to prosecute any claims to the non-elected "D" species it is believed the Examiner properly refused entry after final rejection of additional claims to the non-elected "D" species, at least not until it has been determined that applicant is entitled to allowance of a generic claim in this application.

116 Reconsideration has been granted to the extent indicated, but the decision of April 20, 1942 is still considered to have been correct and is adhered to.

HENRY VAN ARSDALE
Assistant Commissioner.

Carpenter, Abbott, Coulter & Kinney,
900 Fauquier Ave.,
St. Paul, Minn.

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117 MAILED JUN 13 1942

DEPARTMENT OF COMMERCE
United States Patent Office
Richmond, Va.

BEFORE THE BOARD OF APPEALS

In re: Application of
Clifford L. Jewett
Serial No. 233,293
Filed: Oct. 4, 1938

For: COLORED GRANULATED MATERIAL

EXAMINER'S STATEMENT

Applicant appeals from the final rejection given *all* the claims in this case, found immediately below.

Claim 1. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof including the reaction product of a water-soluble, adhesive film-forming alkali metal compound and a substantially water-insoluble fluorine compound of a metal adapted to inhibit the formation of bloom-producing constituents, which latter will react with the said film-forming adhesive at temperatures below incipient fusion to form a water-insoluble coating on said individual granules.

Claim 2. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof including the reaction product of a water-soluble, silicious film-forming material and a heat-reactive, substantially water-insoluble compound of aluminum adapted to inhibit the formation of bloom-producing constituents, which latter will react with said silicious film-forming material below temperatures at which incipient fusion of the same will take place, said coating being of an unfused nature resulting from a solid phase reaction.

Claim 3. As a new article of manufacture, a comminuted or granular material having a weather-resisting coating on individual granules thereof comprising the reaction product of a water-soluble silicate and a substantially water-insoluble compound of aluminum, said reaction product comprising a dense, substantially water-insoluble complex alumino-silicate resulting from the interreaction of the aforementioned water-soluble and water-insoluble reactants.

118 Claim 21. As a new article of manufacture, a roofing element having a weather-resisting coating thereon comprising coated granular material

as defined in claim 2, dispersed and emberred in a bituminous binder.

Claim 22. A translucent granule opacified with a siliceous aluminate coating comprising the heat reaction product of an alkali silicate, a water-insoluble alumino-bearing compound and a water-insoluble alkali metal fluoride.

Claim 24. The method of producing coated, color-bearing comminuted material or granule which comprises admixing granules with a water solution of sodium silicate having a substantially water-insoluble compound of aluminum disseminated therein so as to coat surfaces of the granules with the mixture of water and the other ingredients aforesaid, dehydrating the resulting mixture so as to leave the reactants comprising said sodium silicate and said compound of aluminum in intimate admixture of surfaces of said granules, and further heating said granules so as to cause said reactants to react with each other to form a dense, water-resistant coating.

25. A method as defined in the preceding claim further characterized in that the said reactants are caused to react at temperatures below the point of incipient fusion of the same.

26. The method of producing coated, color-bearing comminuted material or granules which comprises admixing granules with a water solution of sodium silicate having a substantially water-insoluble alumino-silicate and a substantially water-insoluble alkali metal compound of fluorine disseminated therein (forming a slurry-like mixture) so as to coat surfaces of

said granules therewith, dehydrating the resulting mixture so as to leave the reactants (comprising the sail alkali metal silicate, the alumino-silicate and the alkali metal compound of fluorine) in intimate admixture in situ on surfaces of said granules, and further heating said granules until said reactants have interreacted to form a substantially water-insoluble and non-alkaline, dense coating over surfaces of individual granules.

27. The method of producing coatings on granular roofing material which includes reacting an alkali metal compound of aluminum and a clay by heat on the surface of a heat-resistant base granule to produce an insoluble weather-resisting coating thereon and controlling the heat treatment within limits above substantially that to obtain a dehydration of the coating but short of fusion thereof.

119 28. The method of producing coatings on granulated roofing material which includes reacting on alkali metal compound of aluminum and a clay on the surface of a heat-resistant base granule to produce an insoluble weather-resisting coating thereon by heating in excess of 850 degrees F. and at least above dehydration of the ingredients and below approximately 1450 degrees F. without fusion of the ingredients.

29. The method of producing color-bearing coatings on granulated roofing material which includes as steps thereof first wetting the granulated material with an aqueous solution of an alkali metal compound of aluminum and then heating the same in the presence of a clay and a pigment for producing reaction

between the alkali metal compound of aluminum and the clay by operating under conditions within the range at least above dehydration and below fusion of the ingredients as obtained at a temperature at least approximately 850 degrees F. and below approximately 1450 degrees F.

32. In the method of producing color coatings on granulated roofing material, the step which includes forming a vitrified color coating upon a siliceous base granule in the presence of an insoluble, vitrifiable color coating upon a siliceous base granule in the presence of an insoluble, vitrifiable fluoride as a coating ingredient.

33. As a new article of manufacture, comminuted roofing granules having a color coating thereon of a weather resistant vitreous coating including the reaction produce of an insoluble fluoride.

34. In the method of producing color coatings on granulated roofing material, the steps which include forming a solid phase reaction color bonding coating of weather resisting character upon a siliceous base granule in the presence of an insoluble fluoride coating material.

35. As a new article of manufacture, comminuted roofing granules having a color coating thereon of a weather resistant coating comprising the reaction product of an insoluble fluoride and alkali metal silicate and a coloring agent.

36. Roofing granules as described, containing the reaction products of a basic flux, a fusible fluorine

compound and a fusible silica-bearing material capable of reacting with said fusible fluorine compared and said basic flux to produce an insoluble product, such granules being substantially free from tendency to effloresce, due to changes in the moisture content of the ambient atmosphere.

37. Roofing granules as described, containing the reaction products of a basic flux, sodium silicofluoride and a fusible silica-bearing material capable of reacting with said basic flux and said fluoride to produce an insoluble ceramic material, such granules being substantially free from tendency to effloresce, due to changes in the mosture content of the ambient atmosphere.

38. A roofing material comprising a base the surface of which is mineralized with granules as set forth in Claim 36.

120 75. A coating process comprising forming an intimate mixture of alkali silicate and a substantially water-insoluble alumina-bearing substance and adding thereto a metal oxide pigment and an alkaline metal compound of fluorine which is not more than slightly soluble in water, to form a mixture comprising a water solution of alkali silicate having said alumina-bearing substance and said compound of fluorine disseminated therein, and then applying the resulting silicate mixture to a lithic surface as a coating with said silicate mixture in substantially unthickened condition.

76. As a new article of manufacture, roofing granules of the class described comprising heat-resistant

base granules having surfaces thereof coated with a colored weather-resisting coating comprising the reaction product of a water-insoluble fluoride of an alkaline metal and an aqueous dispersion of alkali metal silicate, and coloring agent.

77. The method of coloring granular material comprising the steps of: coating the granules with a water-insoluble fluoride of an alkaline metal, an aqueous dispersion of alkali metal silicate and coloring agent; and heating the granules to insolubilize the silicate.

78. The method of coloring granular material comprising the steps of: coating the granules with a water-insoluble fluosilicate of an alkaline metal, an aqueous dispersion of alkali metal silicate and coloring agent; and heating the granules to insolubilize said alkali metal silicate.

79. As a new article of manufacture, refractory mineral roofing granules having a continuous weather resistant coating of the unfused heat reaction product of cryolite, a likuid adhesive, and coloring agent.

80. As a new article of manufacture, refractory mineral roofing granules having a continuous, weather resistant coating of the unfused heat reaction product of cryolite, a liquid adhesive, and chrome oxide.

81. As a new article of manufacture, refractory mineral roofing granules having a continuous weather resistant coating of the unfused heat reaction product of cryolite, aqueous adhesive sodium silicate, and coloring agent.

82. As a new article of manufacture, refractory mineral roofing granules having a continuous, weather resistant coating of the unfused heat reaction product of cryolite, aqueous adhesive sodium silicate, and chrome oxide.

83. The process of preparing a silicate cement which comprises mixing solid fluoride from the group cryolite and sodium silicofluoride with a preformed aqueous solution of a fixed alkali metal silicate of concentration approximately thirty of thirty-eight percent silicate containing at least one molecular proportion of alkali metal oxide for 3.25 molecular proportions of silicon dioxide, the said fluoride being used in proportion up to 50 percent in excess of the amount required theoretically to neutralize completely the said silicate.

121 Docket Division U. S. Patent Office Oct 7 1942

IN THE UNITED STATES PATENT OFFICE

COLORED GRANULATED MATERIAL

In re Application of
CLIFFORD L. JEWETT
Serial No. 233,293
Filed: October 4, 1938 (as a
Continuation-in-Part
of Ser. No. 700,632,
Filed Dec. 1, 1933)

PETITION TO THE COMMISSIONER

FURTHER REQUEST FOR RECONSIDERATION

Honorable Commissioner Patents,
Washington, D. C.

Sir:

Applicant respectfully requests reconsideration of the decision of the Assiistant Commissioner dated May 27, 1942, in respect to his petition to have amendments to the application entered, and especially to have claims timely copied from issued patent entered.

There appears to be no difference of opinion in respect to the facts that claims 89 to 92 hereof (i.e. claims 1, 5, 8 and 9 respectively of Veazey patent No. 2,215,600) are directed to species "D" of the claims of the present application.

The Assistant Commissioner states in his decision of May 27, 1942 that applicant is not entitled to have the said claims, copied from the Veazey patent, entered for consideration on the merits, *"at least not until it has been determined that applicant is entitled to an allowance of a generic claim in this application."* [Italics added). The Assistant Commissioner makes this statement after first observing the fact that a number of claims to the so-called non-elected species "D" are presently in this application and are covered in the Final Rejection. It may now be
also observed that certain claims to species "D", in-
122 cluding claims 37, 39 and 78 now also appear in the
Examiner's Statement. (This application is now scheduled for oral hearing before the Board of Appeals on December 2, 1942.)

This petition raises the question: Can the Commissioner, as a matter of free discretion, refuse to enter claims for consideration on the merits which have been timely copied from an issued patent?

Section 4903 R. S. (U.S.C. Title 35, Section 51) was amended by the Act of August 5, 1939 (which became effective August 5, 1940) to include the following new paragraph:

> "No amendment for the first time presenting or asserting a claim which is the same as, or for substantially the same subject matter as, a claim of an issued patent may be made in any application unless such amendment is filed within one year from the date on which said patent was granted."

The clear meaning of this new legislation is obviously that an amendment which for the first time presents or asserts the claim of a patent within one year from the date of the grant of the patent is entitled to entry and consideration on the merits. What action the Commissioner (or his subordinates) may take in respect thereto under Section 4904 R.S. is of course a matter of free discretion. However, the entry of such an amendment simply calls upon the Commissioner to perform a plain ministerial act in order that an applicant will not be foreclosed of his right of appeal under the statutes and Rules of Practice.

In United States ex rel. Steinmetz v. Allen, 192 U.S. 543, 565; 48 Law. Ed. 555, 564, the Supreme Court stated:

> "It was the duty of the Primary Examiner to accord a hearing or, refusing to do so, to grant an appeal. It was the duty of the Commissioner to compel the appeal. The Commissioner of Patents is primarily charged with granting and issuing patents. Applications for patents are made to him . . ., and his superintendence should be exercised to secure the rights which the statutes confer on inventors. *The first of those rights is a hearing.*" (italics added)

123 While a somewhat different question was naturally involved in the case just quoted over that involved

in the instant case, the situations are parallel in that in this case as well as in that case the action of the Examiner, if not corrected, would deprive the applicant of the right of appeal.

Another case in which the refusal to enter an amendment and to place an application in condition for appeal was corrected by the Courts is that of Coe, Commissioner of Patents vs United States ex rel. Remington Rand, Inc., 84 F. (2d) 240, 242, where the Court made it clear that the case should be acted upon and the amendment in question entered so that the applicant would not be deprived of any right of appeal. The Court further stated:

> "The action of the Commissioner in refusing to direct the entry of the amendment operated to stop all further procedings in the Patent Office. It did not amount to a rejection of the application, from which appeal might be taken to the proper court, but blocked by this method the right of appeal to the Board of Appeals ..., so that petitioner was deprived of any right of appeal whatever for the determination of his rights. In this view of the case, we think that the Commissioner of Patents exceeded his authority in refusing to direct the entry of the amendment and the further consideration of the case by the Primary Examiner."

Returning to the issue of the instant case, if the Commissioner can, at will, refuse to enter an amendment authorized by paragraph 2 of Section 4903 R. S., it is obvious that the Commissioner can emasculate and render nugatory the Act of Congress of August 5, 1939 which introduced this new paragraph. It is believed that for the Commissioner to do this is for the Commissioner to exceed his authority, by analogy to the cases above cited.

When the statute provides that an applicant may present claims copied from a patent within a year after the patent

issues, it is not harmonious with the spirit of that statute for the Commissioner to take the position that he
124 may defer entry of that amendment until after an
appeal to the Board of Appeals is terminated. With equal logic it would follow that the Commissioner could say that he would defer entering such amendment until after the United States Court of Customs and Patent Appeals passed on the case, or until after the District Court of the United States of the District of Columbia, in a R. S. 4915 proceeding, had passed on the case.

It is not believed that the Commissioner is authorized to thus frustrate the purpose and intent of paragraph 2 of Section 4903 R. S., which, as before stated, was enacted into law on August 5, 1939.

It is accordingly requested that the Commissioner direct the Examiner to enter and consider claims 89, 90, 91 and 92 (which are verbatim copies of claims 1, 5, 8 and 9 respectively of Veazey patent No. 2,215,600, filed March 7, 1935, issued September 24, 1940). It is also requested that the Commissioner grant such other and further relief, as requested in applicant's earlier petitions, as upon reconsideration of the case is deemed to be just and proper.

Respectfully submitted,
CLIFFORD L. JEWETT
By CARPENTER, ABBOTT, COULTER & KINNEY
His Attorneys

HJK*P
October 5, 1942.

125 U. S. PATENT OFFICE
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DEPARTMENT OF COMMERCE
United States Patent Office
Richmond, Virginia
October 29, 1942.

Petition for Reconsideration.

Ex parte Clifford L. Jewett,
Serial No. 233,293,
Filed October 4, 1938,
Colored Granulated Material.

Applicant requests further reconsideration of the Assistant Commissioner's decision of April 20, 1942, refusing to direct the examiner to enter and consider claims filed after final rejection.

Applicant asserts that because the claims in question are copied for the first time from a patent the paragraph added to Section 4903 R. S. by Act of August 5, 1939 requires that they be entered and considered even though made after the prosecution before the examiner had been closed by a final rejection. I do not interpret the Statute as having such positive import but rather as meaning that when an amendment for the first time presents a claim or claims from a patent the amendment may not be made unless filed within one year from the date on which the patent was granted even though the amendment is otherwise acceptable for entry and consideration. The Statute is not interpreted to require the entry and consideration of an amendment which meets the requirement of the statutory amendment but is not otherwise acceptable for entry.

The petition is denied.

HENRY VAN ARSDALE
Assistant Commissioner.

Carpenter, Abbott, Coulter & Kinney,
900 Fauquier Ave.,
St. Paul, Minn.

126 COMMISSIONER OF PATENTS
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IN THE UNITED STATES PATENT OFFICE

COLORED GRANULATED MATERIAL

In re Application of

CLIFFORD L. JEWETT

Serial No. 233,293
Filed: October 4, 1938 (as a
Continuation-in-Part
of Ser. No. 700,632,
Filed Dec. 1, 1933)

PETITION TO THE COMMISSIONER OF PATENTS IN PERSON

This petition, which is in the nature of a request for reconsideration of earlier decisions of the Supervisory Examiner and Assistant Commissioner, is being filed along the lines of, and pursuant to the suggestions kindly made by the Commissioner during the oral discussion between him and Counsel's Washington associate, Chas. S. Grindle, Esquire, on Wednesday November 25, 1942.

The petition primarily concerns claims 89, 90, 91 and 92 hereof, which are copies of claims 1, 5, 8 and 9, respectively of Veazey patent No. 2,215,600, issued September 24, 1940 on an application filed March 7, 1935, and assigned to The

Patent and Licensing Corporation, New York, a copy of which is attached hereto. These claims were copied into this application by Amendment filed September 16, 1941, and were accompanied by an Affidavit under Rule 94. (This Affidavit was filed to obviate any delay and without prejudice to applicant's position by virtue of the record disclosure of his parent applications Serial No. 700,632, filed December 1, 1933 and Serial No. 749,481, filed October 22, 1934, both dates being prior to Veazey's filing date.) When said claims were copied herein, this application was under final rejection (and the final rejection was about two months old) but the application was not under appeal. A verified statement of the applicant, executed April 30, 1942, has also been filed herein.

The Examiner refused to enter said claims, either for purposes of Interference or for purposes of appeal.

127 The Examiner held that these claims are directed to species "D", which is a non-elected species but not one as to which division was required.

Illustrative of the claims copied from the Veazey patent is:

> 90. (Veazey Claim 5) The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

Illustrative of species "D" claims which have been entered in this case are claims 37, 39 and 78 (which are listed in the Examiner's Statement, Paper 54). Claim 78 reads:

> 78. The method of coloring granular material comprising the steps of: coating the granules with a water-insoluble fluosilicate of an alkaline metal, an

> aqueous dispersion of alkali metal silicate and coloring agent; and heating the granules to insolubilize said alkali metal silicate.

The close similtarity between the two above-quoted claims is self-demonstrating.

The Assistant Commissioner did *not decide* that applicant definitely has no right to the entry herein of the claims copied from the Veazey patent, but rather held that applicant was not entitled to their entry, "*at least not until it has been determined that applicant is entitled to allowance of a generic claim in this application*": see decision dated May 27, 1942, end of page 1. However, where an applicant is entitled to entry of claims, it is believed that he is clearly entitled to their *prompt* entry. To hold in abeyance decisions on the right to have claims entered, pending the happening of something which may happen several months or a couple of years from now, would, it is believed, constitute an unsound precedent and lead to piece-meal prosecution and unwarranted complications.

Applicant also asserts that the claims copied from the Veazey patent merit entry under paragraph 2 of Section
4903 R. S. (U. S. C. title 35, section 51), added by
128 Act of Congress of August 5, 1939, and made effective August 5, 1940, which reads:

> "No amendment for the first time presenting or asserting a claim which is the same as, or for substantially the same subject matter as, a claim of an issued patent may be made in any application unless such amendment is filed within one year from the date on which said patent was granted."

However, the Assistant Commissioner in decision dated October 29, 1942, takes the position that it is discretionary, even under the circumstances of this case, whether claims copied from a patent into a pending application within the time specified in the Statute will be entered. The Assistant Commissioner takes the position that, even if the subject matter of the copied claims is not divisible from claims entered and under consideration in the pending application, entry of such copied claims may nevertheless be refused.

It is believed that this goes too far and would constitute unsound practice if permitted to become a precedent. It is also believed that this construction of paragraph 2 of section 4903 R. S. would also permit or effect nullification of this section to an extent not intended by the Congress. It is also believed that this refusal to enter copied patent claims, even though they undeniably are directed to substantially the same subject matter as previously entered claims, constitute unsound practice and a refusal to accord applicant a fair hearing; see United States ex rel, Steinmetz v Allen, 192 U. S. 543, 565; 48 L. Ed. 555, 564, where the Supreme Court said:

> "It was the duty of the Primary Examiner to accord a hearing or, refusing to do so, to grant an appeal. It was the duty of the Commissioner to compel the appeal."

Also note the decision of the Court of Appeals, D. C. in Coe, Commissioner of Patents v. U. S. ex rel. Remington Rand, Inc., 84 F. (2d) 240, 242, where the Court said:

> 129 "The action of the Commissioner in refusing to direct the entry of the amendment operated to stop all further proceedings in the Patent Office. It did not amount to a rejection of the application, from which appeal might be taken to the proper court, but blocked by this method the right of appeal to the Board of Appeals . . ., so that petitioner was deprived of any right of appeal whatever for the determination of his

> rights. In this view of the case, we think that the Commissioner of Patents exceeded his authority in refusing to direct the entry of the amendment and the further consideration of the case by the Primary Examiner."

In the present case the applicant should likewise be granted a hearing. Either the Examiner should declare an Interference or applicant should have the right of appeal. In either event the claims should be entered.

Wherefore it is respectfully prayed that the Honorable Commissioner of Patents, in person, direct the Examiner to enter and consider claims 89 to 92 (copied from the Veazey patent). Secondarily, it is requested that the Commissioner grant such other and further relief (e. g. as requested in applicant's original Petition dated January 9, 1942) as upon reconsideration of the case is deemed to be just and proper.

Respectfully,
CARPENTER, ABBOTT, COULTER & KINNEY
Attorneys for Applicant

HJK:b
November 25, 1942.

Patented Sept. 24, 1940 **2,215,600**

UNITED STATES PATENT OFFICE

2,215,600

ARTIFICIALLY COLORED GRANULES AND METHOD OF PRODUCING SAME

Marion H. Veazey, Rutherford, N. J., assignor to The Patent and Licensing Corporation, New York, N. Y., a corporation of Massachusetts

No Drawing. Application March 7, 1935, Serial No. 9,786

9 Claims. (Cl. 91—70)

This invention concerns improvements in the production of artificially colored granules and more particularly artificially colored granules to be used as a surfacing for materials subject to exposure to the weather, as for example mineral surfaced roofing, siding or the like.

Processes have heretofore been in use for the artificial coloring of granules to be used as a surfacing for asphalt coated roofing in order to obtain colorings which are not available in the natural sources of supply of the mineral base, as for example crushed slate, etc.

Chief among the processes that have heretofore been proposed is one wherein the pigment or coloring agent is affixed to the surfaces of the granules by means of soluble silicate and particularly sodium silicate. It becomes necessary therefore in these processes to insolubilize the silicate in order that the coating of artificial coloring may be made permanently weather resisting, or "tight" as it is sometimes referred to. It has therefore heretofore been proposed to heat the coated granules in retorting apparatus at temperatures sufficiently high to effect insolubilization of the coating, the temperatures required for this purpose varying from 900° to 1500° F. depending upon the conditions of the operation. It has likewise been proposed to effect insolubilization of the silicate coating by chemical action under conditions which would avoid the necessity of retorting the granules at such high temperatures, thus reducing the cost of the equipment necessary and also the fuel cost and at the same time making it possible to employ pigments which are harmfully affected when the high retorting temperatures are employed. This chemical method of insolubilization has been utilized by taking advantage of certain classes or types of base granules which are, or which carry constituents that are, reactive toward soluble silicate, permitting the insolubilization to take place at temperatures of from 250 to 650° F. In other instances this method of insolubilization, where the base granule is not itself reactive toward soluble silicate, has been carried out by incorporating in the mixture of the sodium silicate and the pigment with which the granules are coated, a re-agent, such as certain compounds which under the conditions of operation will react with the soluble silicate and permit insolubilization to take place at comparatively lower temperatures.

It has been observed however, for a considerable period of time that while the coloring of granules coated by these processes wherein sodium silicate is utilized as the binding agent, may be made adequately weather resistant by the schemes for insolubilizing the silicate above referred to if carried on under appropriate operating conditions, nevertheless there is another phase to this problem which has presented serious difficulty and a perplexing problem. I have reference to the phenomenon which is referred to in this connection as "blooming". This "blooming" manifests itself in the form of a white or opaque and more or less bulky deposit on the granules, when the finished granules made by the processes above described are moistened with water and the water subsequently evaporated.

In my earlier co-pending application Ser. No. 737,774, filed July 31, 1934, I have described in detail this "blooming" effect, and the apparent mechanism by which it occurs, I have therein described and claimed certain methods whereby to eliminate this blooming tendency in granules artificially colored by the processes wherein use is made of soluble silicate such as sodium silicate as the binding or fixing agent. As stated in my said co-pending application, it appears that this "blooming" effect is due to the presence of sodium carbonate in the film of the coating material. This sodium carbonate apparently results chiefly from the reaction between the hydroxide present in the sodium silicate used in the coloring process and carbon dioxide present in the flue gases with which the granules are heated in order to bring the colored coating to the insolubilized state. Some of this "blooming" effect is apparently due also to the presence in the film of certain amounts of sodium hydroxide (free alkali contained in the sodium silicate) which, when leached out on contact with moisture, slowly reacts with the carbon dioxide of the air to form sodium carbonate.

In my said earlier application I disclosed methods for overcoming this blooming effect, according to which the absorption of carbon dioxide by the alkali contained in the film of silicate during the passage of the coated granules through the retort or kiln, may be prevented. Also, I disclosed therein certain separate steps of treating the granules, after they have been retorted, with material which would remove from the film of the finished granules such sodium carbonate and sodium hydroxide as might be present therein and give rise to the "blooming" effect.

My present invention has for its object the production of artificially colored granules, utilizing sodium silicate as the fixing or binding agent for the pigment, in which the normal tendency of such granules to exhibit the "blooming" effect in service is eliminated by methods simpler and more expeditious than those set forth in my said co-pending application, with the production of granules which will not only be non-blooming but which also have a tight and weather resisting coloring film.

My present invention and the means by which the objects thereof are accomplished are based upon the reaction of sodium silicate with materials which produce reaction products all of which are substantially insoluble in water. The reacting materials which I employ in accordance with my present invention for reaction with the soluble silicate also reacts with the alkali which may be present in the sodium silicate, so that the resulting granules are neutral. This neutralization of the alkali therefore avoids the possibility of absorption of carbon dioxide by the alkali to produce sodium carbonate, which is the material that really causes the blooming, as explained in my aforesaid co-pending application. The silicate is insolubilized with the production of reaction products that are substantially insoluble in water. At the same time, the insolubilization of the silicate may be effected at low temperatures varying from room temperature to 650° F., thus retaining all of the above stated advantages of low temperature operations when compared with operating at high temperatures.

The reagents used in accordance with my present invention, as will presently be described in greater detail, should possess the following chief characteristics or properties:

1. It must be one which is capable of producing insolubilization of the silicate at relatively low temperatures;

2. It must react with the alkali present in the film so that the resulting granules are neutral; and

3. It must be capable of producing reaction products with the soluble silicate, all of which are substantially water-insoluble.

The importance of utilizing reagents to effect insolubilization with the production of reaction products that are insoluble in water or substantially so resides in the fact that many water soluble or partly water soluble salts may themselves be of bloom forming character, as distinguished from sodium carbonate which, as explained in my aforesaid application, gives rise to a "bloom" by becoming converted under conditions that the granules meet in service, into a hydrated salt that forms a bloom.

I have found that certain types of fluosilicates which are normally only slightly soluble in water, such as barium fluosilicate, react with sodium silicate in such a way that the reaction products are practically insoluble in water. Commercial barium fluosilicate is acid, imparting a pH of somewhere between 3.0 and 5.0 to water in which it is immersed and its solubility varies from 0.02 to 0.09 gram per 100 cc. of water depending upon the temperature. The reaction between barium fluosilicate and sodium silicate takes place at normal temperature in a relatively short period of time and the rate of reaction can be controlled to a certain extent by the amount of water present.

The reaction may be represented by the following equation:

$$Na_2SiO_3+BaSiF_6 \quad BaSiO_3+Na_2SiF_6$$

In the above equation the barium silicate which is one of the products of the reaction is insoluble in water, while the sodium fluosilicate which is the other product of the reaction, is soluble in water to only a slight extent, namely 0.65 gram per 100 cc. at 17½° C.

In actual practice of the process utilizing barium fluosilicate as the reagent in accordance with the above equation, it is found that much less than metathetical proportions of the barium fluosilicate are required because the greater portion of the sodium silicate is insolubilized by the dehydrating action under the conditions of operation and it is necessary therefore that the barium fluosilicate shall react only with the soluble portion of the sodium silicate, namely that portion which is not insolubilized in drying.

In the practice of my invention the granules may first be mixed with the required amount of sodium silicate and the desired pigments or with a suspension of the pigment in the silicate. After being mixed, the barium fluosilicate is added in the form of a finely divided powder or as a paste with the least possible amount of water, the mixing being continued for a little time longer. The order of mixing however is not critical and in certain instances it may be preferable to mix the dry granules with the pigments and the barium fluosilicate followed by adding the required amount of sodium silicate and continuing the mixing for a few more minutes. In either event, however, an excess of water should be avoided as such excess appears to impair the color of the finished granules in certain instances and also requires larger quantities of the barium fluosilicate. This reagent, being a rather expensive one, should of course be employed in the minimum quantities necessary to produce the desired results. The larger quantities necessary to produce these results when an excess of water is present during the mixing is apparently due to the fact that with such excess of water a greater amount of the barium fluosilicate in solution is consumed in reacting with the soluble portion of the sodium silicate. This, as above stated, is not necessary where heat is also employed because the action of the heat insolubilizes the greater part of the sodium silicate and it is necessary therefore only to use such an amount of the barium fluosilicate as will react with the remainder of the sodium silicate and with any sodium hydroxide and sodium carbonate that may be present. The use of the barium fluosilicate in the process herein described accordingly may be more or less interchangeable in respect to the quantities employed, with the degree of heat employed in treating the coated granules. This will more fully appear from the specific examples given hereinbelow.

By this treatment I have found it is possible to obtain artificially colored granules utilizing sodium silicate as the binder, the coloring film being permanently weather resistant and free from any constituents such as sodium carbonate or materials which tend to form sodium carbonate and give rise to the "blooming" phenomenon above referred to. As already explained, the reaction is also of such character as to make it possible in fact to artificially color the granules with air drying of the coating and thus avoid the retorting of the granules, although the expense of the heat employed in retorting may be balanced against the amount of barium fluosilicate employed.

As one specific example illustrating the invention I have been able to produce an artificially colored granule utilizing Pennsylvania glass sand as the base granule. 400 parts by weight of these granules were mixed with four parts of lead chromate for the production of a yellow granule and with 5⅓ parts of barium fluosilicate and 24 parts of sodium silicate, 4 parts of water being included in the mix to provide proper workability.

The sodium silicate employed was a commercial grade known as "N" brand, in which the weight ratio of Na_2O to SiO_2 is 1:3.25 and containing 62% of water. The granules as thus coated after being air dried for 48 hours at room temperature showed, when subjected to the usual wash tests, a satisfactory tightness, there being only a slight or negligible loss and the film of the pigmented reaction product being firmly adherent to the base granules. Specifically, five successive washings of a 25 gram sample of the dried granules with hot water showed a loss of only 0.003 gram. Also, extraction of the granules with cold water showed the presence of only very low amounts of hydroxide or carbonate, the values obtained by titration of the water extract with phenolpthalein indicating quite conclusively that the amount of "bloom" from these granules would be entirely negligible. Also, separate "blooming" tests as described in my aforesaid application showed that the granules thus produced would show substantially no "blooming" in service.

As another illustration of the invention and one which also illustrates the interchangeability between the amount of barium fluosilicate employed and the temperatures at which the granules are dried is as follows:

400 parts by weight of trap rock granules were mixed with 4 parts by weight of chromic oxide (Cr_2O_3) for the production of a green granule, and with 24 parts of sodium silicate, 4 parts of water, and with 2⅔ parts of barium fluosilicate. The thus coated granules were dried in a kiln at temperatures between 550 and 600° F. and the finished granules likewise showed satisfactory tightness and also no indication of any tendency to "bloom". Specifically, the washing of 25 gram samples of the finished granules five successive times with hot water showed a loss of only 0.010 gram insoluble matter. Cold extraction tests, i. e., when 50 grams of the finished granules were extracted with cold water showed complete neutrality upon titration with phenolphthalein, thus indicating that there was neither sodium carbonate nor sodium hydroxide present on the granules and that therefore the finished granules would exhibit no tendency to "bloom." This was confirmed by separate blooming tests.

Comparing the foregoing specific example with the one first above given it will be noted that in the one case the requisite tightness of the film and its freedom from blooming is obtained by air drying the coated granules utilizing 5⅓ parts by weight of barium fluosilicate with 24 parts of sodium silicate to treat 400 parts of granules; whereas in the other case, utilizing heat of the order of 550 to 600° F. substantially the same results are obtained with only 2⅔ parts by weight of barium fluosilicate for treating the same amount of granules with the same amount of sodium silicate.

While I have hereinabove explained what I believe to be the theory underlying the results obtained by my invention and have depicted the same by chemical equations, it is to be understood that I do not wish to be confined to such theory as it is quite possible that the reaction or reactions which occur in carrying out the invention may be much more complex than that stated. The fact remains however that the results herein stated are obtainable by carrying out the invention in the manner described.

In lieu of barium fluosilicate as the reagent in the process according to the present invention there may be employed the commercial form of sodium fluosilicate. This commercial form of sodium fluosilicate is slightly soluble and has an acid reaction in solution.

I claim:

1. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, soluble silicate, and a slightly soluble fluosilicate adapted to react with the silicate with neutralization of the alkali, and then drying the granules, the proportions of said fluosilicate in relation to the soluble silicate being sufficient to produce granules substantially devoid of free alkali and of water-soluble salts.

2. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, sodium silicate, and barium fluosilicate and drying the granules at the temperatures below 650° F.

3. The method of artificially coloring granules which comprises coating the granules with a mixture of pigment, sodium silicate, and barium fluosilicate, and then drying the granules at temperatures below 650° F., the proportion of barium fluosilicate in relation to the sodium silicate being such as to produce granules which are of neutral reaction and free of salts of appreciable water-solubility.

4. The method of coloring granular material comprising spreading coloring agent, barium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

5. The method of coloring granular material comprising spreading coloring agent, sodium fluosilicate and an aqueous dispersion of alkali-metal silicate over the surfaces of the granular material and drying the coated granules.

6. Roofing granules which consist of granular mineral nuclei individually carrying upon substantially all their surfaces a coating of the low temperature reaction products of barium fluosilicate, alkali-metal silicate in an aqueous dispersion, and a coloring agent.

7. Roofing sheets surfaced with the article of claim 6.

8. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of the reaction product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

9. As a new article of manufacture, roofing granules of the class described having on the exterior thereof a substantially non-blooming, insoluble coating, said coating consisting substantially of pigment and the reaction product of sodium fluosilicate and sodium silicate, and being substantially free from water-soluble salts of sodium.

MARION H. VEAZEY.

JAN 26 1943
COPY MAILED

DEPARTMENT OF COMMERCE
United States Patent Office
Richmond, Virginia

January 26, 1943.

Petition for Reconsideration.
Ex parte Clifford L. Jewett,
Serial No. 233,293,
Filed October 4, 1938,
Colored Granulated Material.

Applicant petitions for reconsideration of the previous decisions on applicant's petition filed January 10, 1942.

A brief resume of certain of the high-lights may be helpful.

In office action of May 27, 1940 it was pointed out that the claims then in the case included generic claims and other claims drawn to four distinct ultimate species, designated by the examiner as "A", "B", "C" and "D" respectively, and none of the generic claims was allowable. Election of a single species was required, the examiner stating further as follows:

> "Since groups A and C were original claims and received action, the election of a single species must be confined to one of these groups, since the original presentation and action constitute an election of A and C."
>
> "Species B and D (claims 37, 39, 60 and 61) were not originally presented, and are rejected as directed

> to a nonelected species, no allowable generic claim being present."

Following requests by applicant for withdrawal of the requirements of election, and the refusal of the requests applicant in letter of May 31, 1941 stated as follows:

> "Pending the allowance of generic claims, applicant has elected to prosecute the species claims of group A, (claims 5, 6, 7, 18, 19 and 40) as set out in the office action dated May 27, 1940."

134 Final rejection followed July 11, 1941.

It was after this final rejection that on September 16, 1941 applicant submitted the claims with which this petition is concerned. These claims are drawn to the non-elected species D and the examiner refused to enter the claims for that reason. The petition of January 10, 1942 followed.

On January 12, 1942 applicant appealed to the Board of Appeals from the final rejection but applicant has secured repeated postponements of the hearing, and it is now set for March 17, 1943. Therefore at present the final rejection of the examiner must be considered correct and sound and this decision is that there is no allowable generic claim and that applicant is not entitled to secure claims in this application to non-elected speciesD.

Applicant states that no division has been required between claims to the A species and claims to the D species and asks "where else could the claims from the Veasey patent in question be copied except into this application?" It is immaterial to note that applicant does not assert that a requirement of division by the office is a prerequisite to filing a divisional application or state why any attempt by applicant to make the claims in another application would be futile, because, in any event, the question here is not where else applicant can make the claims but solely whether they can or cannot properly be copied into the present application after the prosecution became closed by the final rejection.

Applicant does not appear to question the rule applied by the examiner that in the absence of an allowable generic claim claims to two or more "distinct ultimate" species may not be allowed in one application, but appears to take the position that this rule does not apply when the claims to a second and non-elected species are copiedfrom a patent and that in such case applicant should be allowed claims both to the elected species and to another distinct and non-elected species in the same application even in the absence of an allowable generic claim. It seems to me if the claims to the second and non-elected species are not allowable in the application when they are not copied from a patent they are also not allowable in the application when they do happen to be copied from a patent. Here no generic claim has been allowed and the allowance of such a claim in the future cannot be presumed.

135 Possibly applicant will decide not to continue with the appeal and in any event it cannot be presumed that a generic claim will be allowed on the appeal. The rejection is merely subject to review by the Board of Appeals and is not nullified merely by the filing of the appeal therefrom. Further, it cannot now be anticipated whether in the event the appeal is carried through and a generic claim is allowed by the Board of Appeals applicant would or would not then be entitled to allowance of species D claims in this ap-

plication. That question must await the decision on the appeal and further action thereafter by the examiner.

As the application now stands claims to the A species have been elected and no generic claim is allowed and applicant is not entitled to allowance therein of the claims to the non-elected and distinct D species even though the claims happen to be copied from a patent. Therefore the examiner was correct in not entering the claims after the prosecution had been closed by the final rejection.

Applicant desires interference be set up between this application and the Veasey patent on the claims copied from the patent but Rule 94 provides that an interference be declared "when such applications and patents contain claims - - - which are allowable in all of the applications involved". At present the claims have been held not entitled to entry in this application and have not been held allowable in this application.

Reconsideration has been accorded as requested but it is considered the previous decisions are correct and they are adhered to.

HENRY VAN ARSDALE
Assistant Commissioner.

Carpenter, Abbott, Coulter & Kinney,
900 Fauquier Ave.,
St. Paul, Minn.

APPELLANT'S EXHIBIT NO. 2

136 FILED Jul 16 1943
Charles E. Stewart, Clerk

DEPARTMENT OF COMMERCE
United States Patent Office

To all persons to whom these presents shall come,
Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of Papers 17, 26 and 28, in the matter of the

Pending Application of
RICHARD PAUL CARLTON,

Filed March 10, 1939, Serial Number 261,069,
for
Improvement in Sandpaper Comprising Silicate Coatings.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this fifteenth day of June, in the year of our Lord one thousand nine hundred and forty-three and of the Independence of the United States of America the one hundred and sixty-seventh.

CONWAY P. COE
Commissioner of Patents.

ATTEST:
JOHN HANS
Chief of Division.

(SEAL)

137 MAILED Nov 29 1941

IN THE UNITED STATES PATENT OFFICE

BEFORE THE BOARD OF APPEALS

Ex parte Richard Paul Carlton

Application for Patent filed March 10, 1939, Serial No. 261,069. Siliceous Cement Composition.

Mr. Paul Carpenter for appellant.

This is an appeal from the action of the Primary Examiner finally rejecting claims 1, 2, 7, 9, 10, 11 and 22 to 25. The appeal is dismissed as to other claims.

Claims 1 and 11 will serve as illustrative:

1. A cement comprising in intimate mixture an alkali silicate, a metal compound having a metallic ion concentration in water of the order of that of calcium carbonate and zinc oxide and which will react with said alkali silicate to form an insoluble silicate, and a finely divided inert material comprising silica.

11. A sheet abrasive article or belt comprising a layer of abrasive grains embedded in a grit-bonding layer or coating of an organic protein adhesive material, the cutting qualities and heat-resistance of said abrastive article being substantially enhanced by a grit-sizing or sandsizing coat applied over the said abrasive grains and over said grit-bonding coating, said grit-sizing coat comprising a mixture of a water-insoluble organic material of the nature of casein and an alkali silicate, said casein and alkali silicate mixture being treated with an agent to waterproof the same.

The references relied upon by the examiner are:

138	Henshaw,	125,390,	Apr. 9, 1872,
	Copeland,	224,078,	Feb. 3, 1880,

Stevens,	225,658,	Mar. 16, 1880,
Sibley,	230,202,	July 20, 1880,
Neil,	1,030,114,	June 18, 1912,
Johansen et al,	1,555,119,	Sep. 29, 1925,
Power,	1,615,231,	Jan. 25, 1927,
Richmond,	2,089,426,	Aug. 10, 1937,
de Leeuw,	2,114,166,	Apr. 12, 1938.

The claims on appeal are directed to the production of an abrasive article in the nature of sandpaper, the alleged novelty residing primarily in the bonding or coating material used. Appellant's bonding material is broadly defined in the claim above copied but preferably also includes a modifying agent such as casein to increase flexibility. In the brief appeal as to claims 3, 4, 6, 19, 20 and 21 is withdrawn.

Of the remaining claims, claims 1 and 2 are directed to somewhat the same subject matter as is covered by the de Leeuw patent. These claims are said to be modeled on claims 1 and 2 of this patent but instead of claiming the silica gel of the patent, the appealed claims include a finely divided inert material comprising silica. To this extent these claims are obviously broader than the claims of the patent and we believe, therefore, properly rejected on the patent to Johansen et al. This patent discloses an abrasive article where in the bonding agent comprises sodium silicate, zinc oxide or its equivalent and a filler such as feldspar or clay. Since feldspar is a silicate, the terms of the claims appear to be satisfied, particularly as the specific materials mentioned by Johanson et al are also mentioned by appellant as suitable for his purpose. It 139 will thus be seen that the two claims under consideration are either directly anticipated by Johanson et al or that these patentees disclose materials which are the full equivalent of those claimed.

In the brief appellant next discusses claims 9, 10 and 24 which are broadly directed to a bonded abrasive article and particularly to the use of a particular type of addition agent. In claim 9 this bonding agent is defined as a protein which does not melt upon heating. In claim 10 it is referred to as a water-insoluble organic adhesive. Claim 24 is specific to casein. We do not find in this application as originally filed any disclosure of any such classes of material as are recited in claims 9 and 10. The definitions of these claims appear to be mere generalization based upon the specific disclosure of casein. Such a broadening of the disclosure appears to be wholly unwarranted.

Claims 9, 10 and 24 have been rejected on the Sibley patent. Sibley discloses a cement made up of glue and silicate of soda rather than casein and silicate of soda. While this reference does not fully meet the claims on appeal, we are not satisfied that appellant is entitled to claims of the breadth of claims 9 and 10. Claim 24 not only is not anticipated but we believe it to be warranted by the disclosure and patentable over the prior art.

Claim 24 has also been rejected on Neil but while Neil shows one of the materials listed by appellant as an equivalent of casein, he uses it for an entirely different purpose and we are not satisfied that it is an equivalent in
140 all respects.

Appellant next discusses the group consisting of claims 7, 22, and 23. Claim 7 is now drawn, like claims 9 and 10, recites a broad class of materials for which there is no corresponding disclosure in the application as filed. Here again, as in the case of claims 9 and 10, appellant has merely generalized on a specific disclosure. The fact that one of the agents disclosed has the properties recited in the last five lines of the claim is not a basis for a claim which includes all elements that have such properties. Claim 7 stands rejected on either Stevens or Johanson et al. Neither Stevens nor Johanson et al discloses an organic modifier. However, we are not satisfied that the claim as drawn fairly distinguishes from these references. It is old to use glue in the art as an organic modifier, as shown by Sibley, and Neil add sucrose and both of these elements are listed by appellant as equivalents for his casein and latex.

Claim 22 is specific to the use of casein and claim 23 is specific to the use of rubber latex. However, appellant is entitled to the allowance of a claim to casein only, in the absence of a generic claim such as claim 7, which, as above indicated, we consider unpatentable for various reasons.

Claim 11 is drawn to the use of an organic protein adhesive material as the grit-bonding layer. While appellant has disclosed the use of glue for this purpose, he has not disclosed that adhesives of this class are generally
141 capable of use in place of glue. Under the circumstances, claim 11 appears to be broader than any invention disclosed.

Claim 25 involves the use of glue as the primary binding agent, together with a secondary coating comprising a silicate cement. The rejection of this claim is based on the Power patent which does show a secondary coating but not such a one as here claimed. Power utilizes a pyroxylin coating to protect his granular material. We are not satisfied that the other references relied on, while they do disclose a cement including a silicate, teach that such a cement would be useful as a sand sizing material. Under the circumstances, we believe claim 25 is to be allowable.

The examiner's action as to claims 1, 2, 7, 9, 10, 11 and 23 is affirmed. His action as to claims 22, 24 and 25 is reversed.

The appeal as to claims 3 4, 6, 19, 20 and 21 is dismissed.

EUGENE LANDERS
Examiner-in-Chief
W. L. REDROW
Examiner-in-Chief
B. PIERCE
Examiner-in-Chief
Board of Appeals

Mr. P. Carpenter
140 S. Dearborn St.
Chicago, Ill.
November 29, 1941

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142 U. S. Patent Office Apr 28 1942

IN THE UNITED STATES PATENT OFFICE
Division 58

In re Application of
RICHARD PAUL CARLTON
Serial No. 261,069
Filed: March 10, 1939
For: SANDPAPER COMPRISING
SILICATE COATINGS.

AMENDMENT

Honorable Commissioner of Patents
Washington, D. C.

SIR:

It is requested that this application be restored to the Primary Examiner for consideration of the following amendment, which is necessary in view of patent No. 2,278,158 of Willis C. Ware, which issued March 31, 1942, on an application filed June 24, 1940, said application being designated as a continuation-in-part of Ware Serial No. 302,322, filed November 1, 1939.

The present application was appealed to the Board of Appeals, and in Decision dated November 29, 1941 several claims, *including claim* 25, were held to be patentable to the present Applicant. The claims of the said Ware patent are directed to the same subject matter as allowed claim 25 of the present application, and since the present application has a record filing date earlier than Ware no Affidavit under Rule 94 is needed, and the claims of the Ware patent are copied herein for purposes of interference and for purposes of allowance to the present Applicant.

Therefore, kindly amend this application to include the following additional claims:

143 26. A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive coat softenable by heat anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of inorganic material of the alkali metal silicates group united to the adhesive coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the adhesive coat, said film being of relatively stable consistency and remaining dry and non-sticky at high abrading surface temperatures, thereby materially avoiding the accumulation of dust arising from the abrasion operation on and between the abrading particles irrespective of the softening of said adhesive coat at said high abrading surface temperatures.

27. A flexible abrasive sheet for use under conditions developing high abrading surface temperatures, comprising a sheet base, a layer of abrading particles spread over

the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of inorganic material of the alkali metal silicates group united to the adhesive making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and non-sticky at temperatures up to 1200 degrees F., whereby, during use of the abrasive sheet under conditions developing heat in excess of 120 degrees F., the abrading surface of said sheet remain substantially dry and non-sticky after said adhesive making coat has become sticky thereby materially avoiding accumulation on said abrading surface of dust arising from the abrasion operation, and substantially prolonging the abrading life of said surface.

144 28. A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a protective film of substantially uniform thickness comprising an alkali metal silicate united to the making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and nonstick at temperatures up to 1200 degrees F., whereby, during use of the abrasive sheet under conditions developing heat in excess of 120 degrees F., the abrading surface of

said sheet remains substantially dry and non-sticky even after said adhesive making coat has become sticky thereby materially avoiding accumulation on said abrading surface of dust arising from the abrasion operation, and substantially prolonging the abrading life of said surface.

29. A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a thin protective film of substantially uniform thickness comprising an alkali metal silicate, a filler, and a moisture retaining substance, united to the adhesive making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and non-sticky at temperatures up to 1200 degrees F. and being relatively hard at such temperatures, whereby said film remains substantially dry and non-sticky at high abrading surface temperatures for materially avoiding accumulation of dust on said abrading surface and also enhancing the abrading qualities of said surface due to the hard film surrounding said abrading particles.

145 30. An abrasive sheet comprising a base, a making coat applied to the base, a protective coat essentially of water soluble silicate having a low heat conductivity applied over and joined to the making coat, a layer of abradant particles extending into both coats and anchored to the making coat, the protective coat being of heat resising material of relatively stable consistency, and the making coat being of adhesive material of relatively unstable

consistency tending to become soft and sticky with increase in temperature, the protective coat acting to prevent any condition of softness and stickiness from spreading through to the exterior of the sheet adjacent the free ends of the abradant particles and thereby eliminating dust and particle acquisitiveness of the heat softened making coat during use of the abrasive sheet in a dry condition on a dry surface.

31. A flexible abrasive sheet comprising a base, a making coat applied to the base, a protective coat of low heat conductivity and high abradant value applied over and joined to the making coat, a layer of abradant particles extending into both coats and anchored to the making coat, the protective coat comprising silicate of soda, and the making coat comprising glue tending to become soft and sticky with increase in temperature, the protective coat acting to prevent the condition of softness and stickiness from spreading through to the exterior of the sheet adjacent the protruding ends of the abradant particles and thereby eliminating dust and particle acquisitiveness of the heat softened making coat during use of the abrasive sheet in a dry condition on a dry surface.

146 32. The method of protecting a thermoplastic adhesive making coat of an abrasive sheet which comprises the step of applying over such a making coat a thin protective film of heat-resisting material which will not soften or become tacky at temperatures which otherwise would soften and render the making coat tacky.

33. The method of protecting a thermoplastic adhesive making coat of an abrasive sheet which comprises the step of applying over such a making coat a thi ncontinuous protective film which is relatively resistant to softening, tack-

iness and disintegration in the presence of mounting temperatures such as would tend to soften and render the making coat tacky whereby to maintain over the making coat a seal to prevent contact therewith of loose foreign particles.

34. A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive coat softenable by heat anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of water soluble high ratio silicate of soda united to the adhesive coat, surrounding particles in general conformity with the surface contours thereof, and forming a seal against exposure of the adhesive coat, said film being of relatively stable consistency and remaining dry and non-sticky at high abrading surface temperatures, thereby materially avoiding the accumulation of dust arising from the abrasion operation on and between the abrading particles irrespective of the softening of said adhesive coat at said high abrading surface temperatures.

147 35. A flexible abrasive sheet comprising a base, a making coat applied to the base, a protective coat of low heat conductivity and high abradant value applied over and joined to the making coat, a layer of abradant particles extended into both coats and anchored to the making coat, the protective coat comprising high ratio silicate of soda, and the making coat comprising glue tending to become soft and sticky with increase in temperature, the protective coat acting to prevent the condition of softness and stickiness from spreading though to the exterior of the sheet adjacent the protruding ends of the abradant particles and thereby eleminating dust and particle ac-

quisitiveness of the heat softened making coat during use of the abrasive sheet in a dry condition on a dry surface.

Kindly amend the title of this application, as indicated in the caption of this Amendment, to read - - Sandpaper Comprising Silicate Coatings.

REMARKS

Claims 26 to 35, inclusive, presented hereinabove constitute a verbatim copy of claims 1 to 10, inclusive, respectively, of the aforesaid Ware patent No. 2,278,158, issued March 31, 1942. The record filing date of the present application is approximately nine (9) months earlier than the earliest filing date alleged in the Ware patent; and it is about fifteen (15) months earlier than the filing date of the application upon which said Ware patent issued. Thus the present Applicant is prior to Ware on the record.

The gist of the invention of allowed claim 25 of the present application, and of claims 1 to 10 of the Ware patent (copied herein as claims 26 to 35), is a coated abrasive article, or so-called sandpaper, having a binder coat comprising glue and a protective or sandsizing coat comprising a silicate such as sodium silicate cement. This is the
gist of the disclosure of the Ware specification
148 upon which the claims of the Ware patent are pre-
dicated; it is also the disclosure of the present Applicant on which his claim 25 was predicated. Note the last paragraph on page 8 of the present specification; also note original claim 11 hereof, which was a part of the original application.

The Ware patent points out that the sandsize coat or the protective film has, as one of its functions, the matter of increasing the heat resistance of the abrasive article. Ths same virtue of the silicate sandsizing coat is likewise brought out in alowed claim 25 of the present application.

Note that the abrasive article of claim 25 is described as a 'heat-resistant abrasive article''.

Since the same specific illustrative constructions are relied upon by Ware and the present Applicant for the generic provisions of the several claims, no further detailed application of the claims to the present specification appears at all necessary. Detailed discussion in this regard, for the most part, would simply encumber the record unnecessarily. For example, where Ware points out in claims 2, 3 and 4 of his patent that glue will "become sticky at temperatures exceeding 120 degrees F.", it will likewise be clear in the Carlton application that glue will become "sticky at temperatures exceeding 120 degrees F.". Also when Ware points out in claims 2, 3 and 4 of his patent that a sodium silicate film, or sandsize coat (which of the two terms being used is immaterial) remains "dry and non-sticky at temperatures up to 1200 degrees F.", it will be clear that this is obviously likewise true with the present Applicant's sodium silicate film or sandsize coating.

149 Claim 4 of the Ware patent, i. e. claim 29 here involved, specifies that the alkali silicate film also contains a filler and a moisture retaining substance. By referring to the last paragraph on page 8 and, for example, to page 12, lines 8-11 of the present specification, it wil be clear that a silicate sizing coat containing 'a filler'' is disclosed by Carlton. This will also be apparent by referring to various of the silicate cement compositions disclosed in Examples 1 to 5, inclusive, in which clay is disclosed as a filler. Clay or kaolin is the very filler illustrated on page 2 of the Ware patent. From the first half of page 12 of the Carlton application, for example, it will be clear that where the silicate coating is used as the sandsizing coat or film the same type of silicate coating may be employed but it "is usually more fluid" than where a silicate cement is employed as a grit bonding coat. Carlton

also discloses "a moisture retaining substance" (called for in claim 4 of Ware). The casein disclosed in the last half of page 8 in the specification is such a substance. Additionally it will be noted that in the last half of page 7 various 'modifiers" for "siliceous bonds or cements" are disclosed, *including glucose and glycerine* which are the very "moisture retaining substances" illustrated on page 2, lines 27-40, of the Ware patent.

Under the circumstances of this case it will be clear that jurisdiction should be restored to the Primary Examiner and an interference should be declared: see paragraph (h), page 53 of Interference Law and Practice by Revise & Caeser (1940 edition). For the purposes of paragraph 3 of Rule 68, it is pointed out that the reason why claims in the particular wording of claims 26 to 35 hereof were not sooner presented is that the aforesaid Ware patent did not issue until March 31, 1942 and, naturally, did not come to Counsel's attention for some time after that. The above-identified paragraph from Interference Law
150 and Practice by Revise & Caeser makes it clear that there is no need to present any verified statement where claims are copied from a patent, as in circumstances such as those existing here, where the application already contained a claim or claims to the subject matter. The Examiner's attention is also courteously directed to the Commissioner's decision in Ex parte Fischer, 1933 C. D. 10; 19 USPQ 223.

For the reasons stated entry of claims 26 to 35 hereof and the declaration of an interference with the aforesaid Ware patent No. 2,278,158 are respectfully requested.

Respectfully submitted,

RICHARD PAUL CARLTON

April 25, 1942

By Carpenter, Abbott, Coulter & Kinney,
His Attorneys

HJK:mb

151 Mailed Jun 2 1942

DEPARTMENT OF COMMERCE
United States Patent Office
Richmond, Virginia

Please find below a communication from the EXAMINER in charge of this application.

CONWAY P. COE
Commissioner of Patents.

COPY TO ASSIGNEE

Applicant: Richard Paul Carlton
Ser. No. 261,069
Filed March 10, 1939
For SANDPAPER COMPRISING SILICATE COATING

Carpenter, Abbott, Coulter & Kinney
900 Fauquier Avenue
St. Paul, Minnesota

The case, above referred to, is forwarded to the Examiner of Interferences because it is adjudged to interfere with others, hereafter specified. The question of priority will be determined in conformity with the Rules. The interference will be identified as No. 80225 On or before Jul 6, 1942 the statement demanded by rule 110 must be sealed up and filed with the subject of invention, and name of party filing it, endorsed on the envelope. The subject-matter involved in the interference is

Count 1: A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base a layer of abrading particles spread over the base, an adhesive coat softenable by heat anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of inorganic material of the alkali metal silicates group united to the adhesive coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the adhesive coat, said film being of relatively stable consistency and remaining dry and non-sticky at high abrading surface temperatures, thereby materially avoiding the accumulation of dust arising from the abrasion operation on and between the abrading particles irrespective of the softening of said adhesive coat at said high abrading surface temperatures.

Count 2: A flexible abrasive sheet for use under conditions developing high abrading surface temperatures, comprising a sheet base, a layer of abrading particles spread over the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of inorganic material of the alkali metal silicates group united to the adhesive making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and non-sticky at temperatures up to 1200 degrees F., whereby, during use of the abrasive sheet under conditions developing heat in excess of 120 degrees F., the abrading surface of said sheet remain substantially dry and non-sticky after said adhesive making coat has become sticky thereby materially avoiding accumulation on said abrading surface of dust arising from the abrasion operation, and substantially prolonging the abrading life of said surface.

152 *Count* 3: A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a protective film of substantially uniform thickness comprising an alkali metal silicate united to the making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and non-sticky at temperatures up to 1200 degrees F., whereby, during use of the abrasive sheet under conditions developing heat in excess of 120 degrees F., the abrading surface of said sheet remains substantially dry and non-sticky even after said adhesive making coat has become sticky thereby materially avoiding accumulation on said abrading surface of dust arising from the abrasion operation, and substantially prolonging the abrading life of said surface.

Count 4: A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive making coat of material of high adhesion qualities, but of relatively unstable consistency becoming sticky at temperatures exceeding 120 degrees F., anchoring the abrading particles to the base, and a thin protective film of substantially uniform thickness comprising an alkali metal silicate, a filler, and a moisture retaining substance, united to the adhesive making coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the material of the adhesive making coat, said film being of relatively stable consistency remaining dry and non-sticky at temperatures up to 1200 degrees F. and being relatively hard at such temperatures, whereby said film remains substantially dry and non-sticky at high abrading surface temperatures for materially avoiding accumulation of dust on said abrading surface and also enhancing the abrading qualities of said surface due to the hard film surrounding said abrading particles.

Count 5: An abrasive sheet comprising a base, a making coat applied to the base, a protective coat essentially of water soluble silicate having a low heat conductivity applied over and joined to the making coat, a layer of abradant particles extending into both coats and anchored to the making coat, the protective coat being of heat resisting material of relatively stable consistency, and the making coat being of adhesive material of relatively unstable consistency tending to become soft and sticky with increase in temperature, the protective coat acting to prevent any condition of softness and stickiness from spreading through to the exterior of the sheet adjacent the free ends of the abradant particles and thereby eliminating dust and particle acquisitiveness of the heat softened making coat during use of the abrasive sheet in a dry condition on a dry surface.

153 *Count* 6: A flexible abrasive sheet comprising a base, a making coat applied to the base, a protective coat of low heat conductivity and high abradant value applied over and joined to the making coat, a layer of abradant particles extending into both coats and anchored to the making coat, the protective coat comprising silicate of soda, and the making coat comprising glue tending to become soft and sticky with increase in temperature, the protective coat acting to prevent the condition of softness

and stickiness from spreading through to the exterior of the sheet adjacent the protruding ends of the abradant particles and thereby eliminating dust and particle acquisitiveness of the heat softened making coat during use of the abrasive sheet in a dry condition on a dry surface.

Count 7: The method of protecting thermoplastic adhesive making coat of an abrasive sheet which comprises the step of applying over such a making coat a thin protective film of heat-resisting material which will not soften or become tacky at temperatures which otherwise would soften and render the making coat tacky.

Count 8: The method of protecting a thermoplastic adhesive making coat of an abrasive sheet which comprises the step of applying over such a making coat a thin continuous protective film which is relatively resistant to softening, tackiness and disintegration in the presence of mounting temperatures such as would tend to soften and render the making coat tacky whereby to maintain over the making coat a seal to prevent contact therewith of loose foreign particles.

Count 9: A flexible abrasive sheet for use under conditions developing high abrading surface temperatures comprising a base, a layer of abrading particles spread over the base, an adhesive coat softenable by heat anchoring the abrading particles to the base, and a substantially continuous thin protective film consisting essentially of water soluble high ratio silicate of soda united to the adhesive coat, surrounding said particles in general conformity with the surface contours thereof, and forming a seal against exposure of the adhesive coat, said film being of relatively stable consistency and remaining dry and non-sticky at high abrading surface temperatures, thereby materially avoiding the accumulation of dust arising from the abrasion operation on and between the abrading particles irrespective of the softening of said adhesive coat at said high abrading surface temperatures.

Count 10: A flexible abrasive sheet comprising a base, a making coat applied to the base, a protective coat of low heat conductivity and high abradant value applied over and joined to the making coat, a layer of abradant particles extended into both coats and anchored to the making coat the protective coat comprising high ratio silicate of soda, and the making coat comprising glue tending to become soft and sticky with increase in temperature, the protective coat acting to prevent the condition of softness and stickiness from spreading through to the exterior of the sheet adjacent protruding ends of the abradant particles and thereby eliminating dust and particle acquisitiveness of the heat softened making coat during use of the
154 abrasive sheet in a dry condition on a dry surface.

This interference involves your application, above identified, and patent No. 2,278,158 for COATED ABRASIVE, granted March 31, 1942 on application Serial No. 342,113, filed June 24, 1940 by Willis C. Ware, whose post office address is 59 West Hubbard Street, Chicago, Illinois, and whose attorney is Banning & Banning, 1 N. LaSalle Street, Chicago, Illinois and whose assignee is Margaret R. Ware, Chicago, Illinois.

The relation of the counts of the interference to the claims of the respective parties is as follows:

Count	*Carlton*	*Ware*
1	26	1
2	27	2
3	28	3
4	29	4
5	30	5

6	31	6
7	32	7
8	33	8
9	34	9
10	35	10

Counts compared.

E. F. DOWELL
Examiner, Div. 58

APPELLANT'S EXHIBIT NO. 3

155 FILED Jul 16 1943
Charles E. Stewart, Clerk

DEPARTMENT OF COMMERCE
United States Patent Office

To all persons to whom these presents shall come,
Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of the Specification, as originally filed, omitting Claims, in the matter of the

Pending Application of

CLIFFORD L. JEWETT,

Filed December 1, 1933, Serial Number 700,632,
for
Improvement in Colored Granulated Material.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this fifteenth day of June, in the year of our Lord one thousand nine hundred and forty-three and of the Independence of the United States of American the one hundred and sixty-seventh.

CONWAY P. COE
Commissioner of Patents.

ATTEST:
JOHN HANS
Chief of Division.

156 SPECIFICATION

To WHOM IT MAY CONCERN:

Be it known that I, CLIFFORD L. JEWETT, a citizen of the United States, and a resident of Saint Paul, in the County of Ramsey and State of Minnesota, have invented certain new and useful improvements in

COLORED GRANULATED MATERIAL

of which the following is a specification.

This invention relates in general to granulated mineral material and more particularly to an improved process for treating granulated mineral material and to the resultant product, more especially to the production of such a granulated mineral material having a water-resistant color-bearing coating suitable for embodiment in roofing material, and while the invention is described as a colored granule and process for making the same to be incorporated in roofing materials such as shingles and the like, it will be understood that the invention finds a wide field of utility.

The product of this invention may be incorporated as a coating for a roofing shingle or as an aggregate for incor-

poration in artificial stone such as cast stone and the
157 like, and for the base granule I may employ natural
or artificial mineral substances, such, for example,
as slags, feldspar, slate, quartz, quartzite, igneous rocks
and, in fact, practically any of the minerals which may be
found in the ordinary gravel pit, as natural mineral substances,
or I may employ crushed brick and other baked
clay and similar material, porcelain, terra cotta or other
ceramic wastes or cement compositions.

In the prior art relating to this subject, particularly where a ceramic coating is applied to the mineral base granule under the application of high temperatures to produce a glaze thereon, it is necessary to employ care in selecting a base granule which must be refractory and free from impurities which tend to discolor the glaze.

I am enabled to employ a relatively inexpensive base granule, and the ordinary impurities found in mineral materials such as iron and manganese have no effect on the resulting color obtained in the coating, and thus practically any gravel pit may yield a granule suitable for coating according to the process of my invention.

The coated granule, according to this invention, may be incorporated as a weather-resisting coating in a bituminously coated sheet for forming roofing material either in rolls or in shingles, or the base granule coated according to this invention may be incorporated in cast stone and the like.

158 Heretofore, efforts have been made to treat
crushed mineral material with a color bound to the
granule with an organic bond, but this is unsuited for many
purposes, inasmuch as the colors are only indifferently
permanent, and the organic bond does not have the life or
ageing characteristics necessary, particularly where it is
desired to employ the granules in cast stone and the like.

As an alternative, inorganic bonds have been experimented with, and chief among those known to me are the type employing a sodium silicate as the base or those employing metallic coloring agents and fluxing or fixing agents which must be subjected to relatively high temperatures for producing a fusion of the glazing material onto the surfaces of the granules.

In these methods and in the articles resulting therefrom the colors are contained in a sodium silicate colloidal dispersion, the granules being coated with this mixture and then heated to bind the color and the silicate to the granule. The chief defects of these methods and the resulting products which limit their possible use are the lack of strength of color and proper tone of color, tendency to blooming, lack of permanence of color and the limit of the range of colors available to be produced. Furthermore, these methods and the resultant articles are expensive and, as well, require care in selection of the base granule.

159 In the prior art known to me employing silicates, the temperature disclosed in such prior art are either insufficient to produce an insoluble coating composition on the granules, or are extended to such a degree as to produce fusion, and, furthermore, the relationship between the silicates and other ingredients disclosed in the prior art are insufficient to provide a cement which is insoluble and weather resisting.

The principal objects and advantages of this invention reside in the provision of an improved article of manufacture, coated colored granules, which may be manufactured with a wide range of colors of extreme permanence and at a reasonable cost; the provision of treated granules of the character referred to in which a good bonding action can be attained between the base granule and the color-bearing coating; the provision of an improved granulated material suitable for use when exposed to the weather, in which desired color effects may be attained and in which steps of carrying out the process of manufacturing the same are reduced so as to reduce the cost of manufacture.

This invention also contemplates an improved method of applying a color bearing coating to mineral granules, which does not necessarily require, and, in fact, preferably avoids the employment of the extremely high temperatures usually found necessary in producing glazed coatings; the provision of an improved process in which the reaction products of silicate and a material containing a metallic oxide or its equivalent, such, for example, as a clay, are employed for incorporation in a coating to be applied to a mineral granule; the provision of an improved process and resulting article in which the silicates such as sodium silicate and metallic oxide containing components such as clays, kaolin, or aluminiferous materials, such as aluminum silicate, sodium aluminum silicate, and the like, may be reacted together with a pigment to form a cement color-bearing coating on the individual granules; the provision of an improved article of manufacture having a color-bearing coating on the individual granules thereof including the heat reacted product of a silicate and a clay; the provision of an improved granulated material having a color-bearing coating wherein the coating is rendered insoluble by the production of a heat reaction product of sodium silicate and clay, including a pigment; the provision of an improved process for the production of granulated material having the individual granules provided with a weather-resisting and insoluble color-bearing coating wherein an improved step of treating the coating is employed for dehydrating and insolubilizing the coating for its entire depth, but, at the same time, preferably avoiding fusion of the coating mixture and thus avoiding deleterious effects on the coating.

The present invention has, as further objects, the provision of an improved granulated finished material having

a colored coating which is permanent in its adherence to the granule; a coating material which has the property of desired fluidity by virtue of the process employed in
161 the course of its application to the granule and which
coating material, therefore, readily spreads on the base granule, assisting in attaining the desired permanence of adherence to the granule, and at the same time possesses suitable coefficients of expansion and contraction so that the color coating may be successfully applied on a wide range of different materials forming the base granule.

For the purpose of my invention, I have employed quartzite granules, due particularly to their ready availability to me, but it will be understood that, by keeping the temperature within limits hereinafter pointed out, other granules may be employed for the purpose, such, for example, as common gravel, slate, dolomite, marble, ganister, etc., as well as crushed porcelain and the like.

The present invention in one of its forms employs as a coating composition an inorganic heat reaction product of a silicate, preferably sodium silicate, and a clay, such, for example, as kaolin, bentonite, and the like for the particular ingredients which I have employed as hereinafter pointed out are when treated according to my process, substantially insoluble in water or under various changes in weather conditions, it being one of the aims of the invention to produce a coating containing a silicate and a clay wherein a substantial dehydration of the mixture takes place without, however, fusion thereof, so that care need not be exercised in the selection of the base granule.

Thus the coating of my invention may be conveni-
162 ently termed a high temperature cement, and where
this expression is employed herein and in the claims I mean to include materials or combinations of materials which are heat reacted to an extent above dehydration

temperature of the materials but below the temperature at which the combination of materials fuses.

As herein pointed out, the mineral base granule may be of any material which will withstand temperatures of the degree necessary to produce the reaction between the silicate and clay without disintegration of the granule, and a suitable pigment to be employed for imparting color to the coating should also be capable of withstanding the temperature necessary to produce the final coating.

The bond in one of its forms in holding the pigment in the coating to the granule is substantially a high temperature cement produced by the reaction of sodium silicate and a clay such as kaolin, or in other of its forms may employ equivalent materials such as sodium silicate with feldspar or cryolite, or where sodium aluminate is substituted for sodium silicate and used with feldspar or clay, or the like, at temperatures which, for my purposes, I have found to range above 450 degrees C. (850 degrees F.). In my production of the coating, reaction is produced between the sodium silicate and clay which is substantially a dehydration of both, with a subsequent sintering together of the two into a hard, strong and non-porous insoluble and weather-resisting cement containing a coloring compound.

I have found in one of the forms of my invention
163 that the ingredients of the color-bearing coating
may be combined in the following proportions:

Granulated mineral (quartzite, etc.) to the extent of 500 grams moistened with 10 cubic centimeters of a sodium silicate solution. This sodium silicate solution should be of a specific gravity of 1.30, and the sodium silicate may be according to the formula $Na_2O\text{-}3.25\ SiO_2$. I have obtained excellent results with a sodium silicate of this character.

To this mixture of sodium silicate and mineral I then and five grams of kaolin which isa well known clay and appears to give excellent results in its reaction with the sodium silicate. To this is added four grams of pure red oxide, and the mix is then agitated until the granules are completely coated. I have found that red iron oxide performs the dual function of lending color and reacting with the sodium silicate for insolubilizing the same.

By preliminary wetting or moistening the granules with the aqueous solution of sodium silicate they are made more receptive of the coating composed of the clay and color pigment such as red iron oxide or chrome oxide or the like.

The granules thus coated are then dried and heated subject to a temperature of from 450 degrees to 750 degrees C. (850 to 1400 degrees F) or higher. Under the application of heat in controlled amount, a reaction between the sodium silicate and clay results to form an insoluble and weather-resisting coating on the individual granules which permanently retains the pigment so that a color-bearing coating is thus produced.

I have found that excellent results are obtained at
164 temperatures even above 1400 degrees F, as long as
the maximum temperature employed is kept controlled below the fusing temperature of the mixture, which fusing temperatures in many cases lie in the range from 1600 degrees F to 2000 degrees F.

Thus, my invention, in one of its aspects, may be said to give its best results and produce a color bearing coating of best quality by the employment of much higher temperatures for reaction purposes than have heretofore been employed for setting cementitious combinations. For example, it is well known in the prior art to employ temperatures ranging from 900 degrees F to as high as 1800 degrees F. for the purposes of producing a fused glaze, depending, of course, on the fusing temperatures of the materials employed. It is not, however, known to me in prior art to produce a hard weather-resisting heat solidified cement with temperatures within the range beginning at or above the dehydration temperatures of the ingredients of the mixture, but controlled below the fusing temperature of the particular mixture employed, which is one of the novel features of my invention.

It will be understood, therefore, that I have chosen that range of temperatures in which important reactions and combinations take place not, however, by fusion.

165 Formulae which have served to produce highly efficient and attractive color bearing coatings employing several different forms of ingredients, in all of which I employ an ingredient containing a metallic oxide or its equivalent, may be exemplified below.

A formula employing feldspar and sodium silicate is as follows:

(1) 500 grams quartz
10 grams feldspar (powdered)
7 grams red iron oxide
10 cc. sodium silicate solution
5 cc. water

Likewise a formula employing cryolite may be as follows:

(2) 500 grams quartz
5 grams cryolite (sodium aluminum fluoride) (powdered)
7 grams red iron oxide
10 cc. sodium silicate solution
5 cc. water

An alternative of formula No. 1 above may be as follows:

(3) 500 grams quartz
10 grams feldspar (powdered)

4 grams iron oxide
3.6 grams sodium aluminate

I have obtained successful results with kaolin and sodium dichromate in the following proportions:

(4) 500 grams quartz
5 grams kaolin
7 grams sodium dichromate (affords color and cement)
10 cc. water

From the foregoing formulae it will be observed that the ingredients feldspar, red iron oxide, cryolite, clay, such as kaolin, all contain proportions of metallic oxides and that this is common to each of the ingredients mentioned. The cryolite is a sodium aluminum fluoride in which the metallic fluoride provides the equivalent to metallic oxide.

It will also be understood that the sodium silicate,
166 sodium aluminate and sodium dichromate ingredients specified herein may be characterized as of a group of alkali bearing components and serve to be reacted upon by the metallic oxide containing ingredients to produce an insoluble coating.

It will be understood, of course, that while I have specified a sodium silicate of a certain specific gravity and have also specified one example of the proportions of sodium silicate to clay and pigment, that this formula is subject to variation to suit different conditions and to attain different tones of coloring desired.

It is to be understood that the temperature range is also subject to variation as desired but that care should be taken, in producing the reaction by heat between the clay and sodium silicate, that an actual fusion of the mixture forming the coating is not produced, as the avoidance of fusion prevents impurities in the base granule from being released, which would cause their entrance into the coating and resultant effect on the color tone produced.

As distinguished from prior art known to me, my invention produces an insoluble and weather-resisting coating which is of an insoluble and weather-resisting character throughout its entire depth, whereas in the prior art known to me there is produced merely a skin effect, and the coatings of the prior art are not possessed of the character of insolubility throughout their entire depth.

167 Apparently in my process, dehydration of the mixtures containing sodium silicate, sodium aluminate or sodium dichromate takes place short of actual fusion of said mixtures and at the same time reacts with the clay or feldspar, as the case may be, by combination, to form an insoluble sodium aluminum silicate which is a distinctly chemical reaction as produced according to my invention and not to be found in the prior art known to me.

The product of a metallic oxide containing component and an alkali bearing component, for example, kaolin and sodium silicate or feldspar and sodium aluminate as disclosed by me, may be of variable composition, the insolubility or resistance to weather being a function of this composition.

In some instances where this invention is employed as a coating for granulated slate, it may be desirable to make certain changes in the proportions, inasmuch as slate itself contains some clay, but the amount of clay contained in slate is not sufficient to react with the sodium silicate or sodium aluminate to render the same insoluble for coating individual granules. On the other hand, I have found that the small amount of argillaceous dust present with slate is in no way detrimental to the coating as applied according to my invention.

For use with a slate, dolomite or marble granule I have successfully employed the ingredients and their proportions as follows:

500 grams slate
5 grams kaolin
4 grams red iron oxide
10 cc. sodium silicate solution SP. G. 1.3

168 It will be understood that in the case of slate the formula last mentioned above may be varied as desired depending upon the porosity of the slate.

Dolomite and marble are suitable for my purposes, it being understood, however, that if these base granules are employed they must be of a character which will withstand the temperatures necessary for roasting. I have found that alkaline earth carbonates apparently are not sufficient to render insoluble a sodium silicate coating and, particularly in the case of a base granule such as quartzite, kaolin clay is found to be practically essential in order to obtain a permanent and insoluble color-bearing coating.

From the foregoing it will be observed that my improved process includes substantially the steps of—

(1) wetting the quartz granules with an aqueous solution of an alkali bearing material such as sodium silicate, sodium aluminate or sodium dichromate;

(2) adding a metallic oxide bearing component, such as clay or its equivalent and a pigment in desired proportions thereto; and

(3) then applying heat at least above the dehydration

temperature of the coating mixture, usually above 850 degrees F., but regulating the degree of heat below the fusing point of the coating mixture, preferably below 1450 degrees F, so as to produce a reaction between the sodium silicate and clay or sodium aluminate and feldspar to produce substantially a sodium aluminum silicate. By this
reaction the entire coating of each granule throughout
169 the depth of the coating is rendered waterproof,
insoluble and weather-resisting.

In the case of the employment of sodium dichromate as the alkali containing component, it may be desirable to go to higher temperature limits to produce the required reaction and render the same insoluble, but yet keeping the temperature below the fusion point of the mixture.

170 IN TESTIMONY WHEREOF, I have hereunto signed my name in the presence of the two subscribed witnesses.

CLIFFORD L. JEWETT

WITNESSES:
G. CHADIME
R. I. MOLINE

BRIEF FOR APPELLEE

In the United States Court of Appeals for the District of Columbia

Appeal No. 8592

MINNESOTA MINING & MANUFACTURING COMPANY,
APPELLANT

v.

CONWAY P. COE, COMMISSIONER OF PATENTS,
APPELLEE

APPEAL FROM THE JUDGMENT OF THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLUMBIA

W. W. COCHRAN,
Solicitor, United States Patent Office,
Attorney for Appellee.

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APPEAL FROM THE JUDGMENT OF THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLUMBIA

BRIEF FOR THE COMMISSIONER OF PATENTS

This is an appeal from the Judgment (24)[1] of the District Court of the United States for the District of Columbia dismissing the complaint (2) in which appellant sought a mandatory injunction which would require the Commissioner of Patents to enter and consider certain claims presented by appellant in the patent application of Clifford L. Jewett, Serial No. 233,293, which is assigned to appellant.

STATEMENT

The application was filed on October 4, 1938 (28). It was filed as a division and continuation in part of an earlier application, No. 700,632, filed December 1, 1933 (173). After nearly three years of prosecution and more than seven and a half years after the filing of the alleged parent application, the application was given a final rejection on July 11, 1941 (63). Up to that time appellant had presented 88 claims.

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[1] The numbers in parentheses in this brief refer to the pages of Appellant's Appendix.

On September 16, 1941, more than two months after the application had been given the final rejection, appellant submitted an amendment (66) presenting 9 new claims, numbered 89 to 97, inclusive, some of which are copies of claims appearing in the patent to Veasey, No. 2,215,600, issued September 24, 1940 (145).

The examiner, on September 30, 1941, (73) advised appellant that proposed claims 89 to 97 would not be entered, for the reason that some of the claims were not fully supported by appellant's application and were moreover directed to a species of the alleged invention different from the one elected by appellant for prosecution in his application,[2] and for the reason that the application being under final rejection was not open to further amendment.

---

[2] Rule 41 of the Rules of Practice reads as follows:

"41. Two or more independent inventions can not be claimed in one application; but where several distinct inventions are dependent upon each other and mutually contribute to produce a single result they may be claimed in one application: *Provided*, That more than one species of an invention, not to exceed three, may be claimed in one application if that application also includes an allowable claim generic to all the claimed species. In the first action on an application containing a generic claim or claims and claims to more than one species thereunder, the examiner, if he is of the opinion after a complete search that no generic claim presented is allowable, shall require the applicant in his response to that action to elect that species of his invention to which his claims shall be restricted if no generic claim is finally held allowable."

The examiner in his action of May 27, 1940 (58), found that four distinct species, A, B, C, and D, were being claimed in appellant's application and that there were no allowable generic claims. The examiner therefore required appellant to make an election, in accordance with Rule 41. Appellant admits (84) that it elected species A and that proposed claims 89 to 92, inclusive, are for species D.

Then followed a request by appellant for reconsideration (75) in which 5 new claims were presented.

Upon refusal by the examiner (89) to enter the amendment, appellant filed a series of petitions (90, 111, 119, 135, 140) to the Commissioner of Patents requesting that claims 89 to 97 be entered and acted upon. All of these petitions were denied (108, 116, 125, 139, 149).

Thereafter appellant filed its complaint in the District Court of the United States for the District of Columbia, and the judgment (24) dismissing it was entered on June 17, 1943.

SUMMARY OF ARGUMENT

I. Under the law and the Rules of Pratice of the Patent Office, the right of an applicant to present new claims does not extend throughout the period that the application is pending. After an application has been finally rejected and is in condition for appeal to the Board of Appeals, the applicant cannot as a matter of right receive consideration of new claims.

Whether new claims should be entertained in an application after it is finally rejected is a matter within the discretion of the Commissioner.

II. The discretion of the Commissioner was not abused in this case. Previous to the final rejection, the application and its alleged parent had been pending for more than 7½ years during which time appellant had ample opportunity to present any claims to the alleged invention that it desired to. Appellant made no showing sufficient to excuse the delay in presenting the amendment.

III. Since the Commissioner's action was neither arbitrary nor capricious, nor in conflict with law but was an action taken in the exercise of his discretion under the law, it should not be disturbed.

ARGUMENT

I

The right of an applicant to present amended or new claims during the prosecution of his application in the Patent Office is covered by Section 4903 R. S. (U. S. C., title 35, sec. 51) and Rule 68 of the Rules of Practice of the Patent Office, which read as follows:

> SEC. 4903. Whenever, on examination, any claim for a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the Commissioner shall order a reexamination of the case.
>
> No amendment for the first time presenting or asserting a claim which is the same as, or for substantially the same subject matter as, a claim of an issued patent may be made in any application unless such amendment is filed within one year from the date on which said patent was granted.

Rule 68. The applicant has a right to amend before or after the first rejection or action. In amending an application in response to a rejection the applicant must clearly point out all the patentable novelty which he thinks the case presents in view of the state of the art disclosed by the references cited or the objections made. He must also show how the amendments avoid such references or objections. In every instance where reconsideration is requested in view of an interview with the examiner or his assistant, the applicant, his attorney or agent must file a written statement of the reasons presented at the interview as warranting favorable action.

After such action upon an application as will entitle the applicant to an appeal to the Board of Appeals (Rule 134), or after appeal has been taken, amendments canceling claims or presenting those rejected in better form for consideration on appeal may be admitted; but the admission of such an amendment or its refusal, and any proceedings relative thereto, shall not operate to relieve the application from its condition as subject to appeal or to save it from abandonment under Rule 171.

If amendments touching the merits of the application be presented, after the case is in condition for appeal, or after appeal has been taken, they may be admitted upon a showing, duly verified, of good and sufficient reasons why they were not earlier presented.

From the refusal of the primary examiner to admit an amendment a petition will lie to the Commissioner under Rule 142.

No amendment can be made in appealed cases between the filing of the examiner's statement

> of the grounds of his decision (Rule 135) and the decision of the appellate tribunal. After decisions on appeal amendments can only be made as provided in Rule 140, or to carry into effect a recommendation under Rule 139.

It is obvious that some limitation on the privilege of an applicant to amend his claims is necessary. If there were no such limitation an applicant could keep his application pending in the Patent Office indefinitely.

It is clear from the statute that the right to have amendments considered is limited for the statute says that the Commissioner shall order a reexamination of the case where after a rejection of a claim the applicant persists in his claim with or without altering his specifications. This obviously does not require the Commissioner to order a still further examination if after one reexamination and second rejection the applicant further persists and offers further amendments.

Notwithstanding the restricted privilege given the applicant by the statute, the practice of the Patent Office in this matter is a liberal one, as will be apparent from the provisions of the rule quoted above.

The third paragraph of the rule relates to cases like the one here under consideration, which have been prosecuted to final rejection before the examiner and which are therefore in condition for appeal to the Board of Appeals. The rule provides that amendments touching the merits of the application in that situation may be made only upon a verified showing of good and sufficient reasons why they were not earlier presented.

Appellant relies on the second paragraph of Section 4903 R. S. and interprets it as allowing as a matter of right the presentation in a pending application of claims copied from a patent, at any time within one year after the patent issues. What the statute actually does is to set a time limit on the copying of claims from a patent, beyond which the Patent Office is prohibited from entertaining the amendment presenting such claims. This falls far short of supporting appellant's contention that the Patent Office *must* entertain any such amendment if filed within the year regardless of how long the application has been pending in the Patent Office and how far its prosecution has advanced. Such could not have been the intent of the law for such a construction would allow an applicant to prolong for all time the pendency of his application by copying claims from patents regardless of whether his application would support such claims.

It is submitted that neither the law nor the Patent Office rules gives appellant the right to have the claims in question entered and considered. The question is rather one resting within the discretion of the Commissioner. If in his opinion a satisfactory showing has been made under the terms of Rule 68, he may permit the amendment, although he is not required to by any statute. To refuse to admit such an amendment does not violate any vested right of an applicant and is not even inequitable for it must be kept in mind that the applicant has ample opportunity to present any and all claims he cares to when he first files his application and to present more at any time before the prosecution is closed before the examiner by a final rejection.

Appellant (Br. 12) relies on this Court's decision in *Coe* v. *U. S. Ex. Rel. Remington Rand, Inc.,* 84 F. (2d) 240; 65 App. D. C. 387. In that case the Patent Office had refused to enter a new or amended claim presented in response to a rejection for the first time on the ground that the rejected claim was not supported by the disclosure made in the application. The Court held that Section 4903 R. S. required a reexamination in such a case. No such situation is present here. The new claims presented by appellant were presented for the purpose of provoking an interference, not for the purpose of overcoming a new ground of rejection by the examiner. It is submitted that the decision is not in point.

Appellant also relies (Br. 15) on the Commissioner's decision in *Ex parte Fischer,* 1933 C. D. 10. This decision if it represented the present practice would lend support to appellant's contention. But this decision was outmoded and in effect overruled by the later decision of the Commissioner in *Ex parte Shohan,* 522 O. G. 501, 48 U. S. P. Q. 326, 1941 C. D. 1.

In the latter case as here the applicant submitted an amendment with new claims after the application was under final rejection. The claims were for a species of the invention different from that which had been elected by the applicant for prosecution in that application. In denying applicant's petition that the amendment be entered, the Commissioner said:

> The practice in force for the last few years provides more rational tests to determine whether the prosecution of a case which has been closed should be reopened in order to afford an applicant an opportunity of appeal from a refusal of claims proposed for interference with a patent, than the mere belief of the applicant that an interference should be declared. While there is no question of applicant's good faith in the present situation, nevertheless the tests of the present practice should be applied. The test of special application here is the right to have the proposed claims allowed in this application. The other tests are well known and it is unnecessary to review them here. Since applicant relies upon *Ex parte Fischer,* it is necessary to rule that insofar as that decision could be invoked to confer a definite right to have claims entered for determination of an applicant's rights thereto independent of the tests above referred to, merely because the claims are copied, or substantially copied, from a patent, such construction of the Fischer decision cannot be followed, and moreover is not in harmony with certain other decisions hereinafter cited.
>
> Neither Rule 94 nor Rule 68 confers the right for which applicant contends. A condition of Rule 94 is that the proposed issues be "allowable in all of the applications involved." Here allowability in this case has not yet been found.
>
> The proposed claims do not qualify under the second paragraph of Rule 68 since they are not presenting claims in better form for appeal.

> The third paragraph of this rule has not been invoked. Entry of claims under this paragraph is discretionary with the Office.

II

The Commissioner did not abuse his discretion in refusing to direct entry of the amendment. His decisions on appellant's numerous petitions show that the matter was carefully considered.

The amendment of September 16, 1941, was not presented until nearly three months after the application was finally rejected, and not until nearly a year after the issuance of the Veasey patent on September 24, 1940 (145). In excuse of the delay in presenting the claim, appellant filed a verified statement (124). The statement is on its face clearly insufficient to excuse the delay. It does reveal that appellant must have been fully aware of the Veasey patent and the character of the claims therein several months before appellant's application was finally rejected. Clearly it was no abuse of discretion on the part of the Commissioner to refuse to accept such a statement as a satisfactory showing under Rule 68.

Appellant's application was pending in the Patent Office and open for amendment 2 years and 9 months before it was finally rejected. Through its alleged parent application No. 700,632, which was filed on December 1, 1933 (173), it was pending more than 7½ years before it was finally rejected. Surely this was ample time in which to formulate and present any and all claims which appellant desired to make. It was not necessary for appellant to see how Veasey claimed his invention to learn how to make claims to the Jewett disclosure.

Other considerations which made it proper, and not an abuse of discretion to refuse entry of the claims, were that some of the proposed claims are not supported by appellant's application and are drawn to a species other than that elected by appellant for prosecution in the present application.

III

Since this is an action in which appellant seeks a mandatory injunction, it is governed by the same principles as those applicable under the old rules to mandamus proceedings. These principles are set forth briefly in this Court's decision in *Hammond* v. *Hull et al.,* 76 U. S. App. D. C. 301; 131 F. (2d) 23, as follows:

> (1) The writ should be used only when the duty of the officer to act is clearly established and plainly defined and the obligation to act is preemptory. (2) The presumption of validity attends official action, and the burden of proof to the contrary is upon one who challenges the action. (3) Courts have no general supervisory powers over the executive branches or over their officers, which may be invoked by writ of mandamus. Interference of the courts with the performance of the ordinary duties of the executive departments of the government would be productive of nothing but mischief. (4) When the performance of official duty requires an in-

> terpretation of the law which governs that performance, the interpretation placed by the officer upon the law will not be interfered with, certainly, unless it is clearly wrong and the official action arbitrary and capricious. (5) For it is only in clear cases of illegality of action that courts will intervene to displace the judgments of administrative officers or bodies. (6) Generally speaking, when an administrative remedy is available it must first be exhausted before judicial relief can be obtained, by writ of mandamus or otherwise.

The Commissioner's refusal to direct entry of the new claims presented by appellant was neither arbitrary nor capricious but was proper under the circumstances hereinbefore set forth. His refusal was not in conflict with law, for no law requires him to consider new claims, presented after an application has been finally rejected.

That the principles set forth in *Hammond* v. *Hull et al., supra,* apply to proceedings for injunctions against the Commissioner of Patents is clear from the following decisions of this Court:

> *Moore* v. *U. S. ex rel. Boyer,* 32 App. D. C. 243,
>
> *U. S. ex rel. American Gas-Accumulator* v. *Coe,* 66 App. D. C. 21; 84 F. (2d) 398,
>
> *U. S. ex rel. Societe de Condensation et D'Applications Mecaniques* v. *Coe,* 67 App. D. C. 207; 91 F. (2d) 238,
>
> *Svenson* v. *Coe,* 69 App. D. C. 359; 101 F. (2d) 684,

Geophysical Development Corp. et al. v. *Coe*, decided June 7, 1943; Certiorari Denied October 11, 1943,

and the decision of the Supreme Court in

Ewing v. *U. S. ex rel. Fowler Car Co.*, 244 U. S. 1.

CONCLUSION

It is submitted that the District Court properly dismissed the Complaint, and that its judgment should be affirmed.

Respectfully submitted.

W. W. Cochran,
Solicitor, U. S. Patent Office,
Attorney for Appellee.

November 1943.

U. S. GOVERNMENT PRINTING OFFICE: 1943